

# Fire Plan for Waikato, Ngā Tai ki te Puku 2021–2024



WHAKARATONGA IWI

**FIRE**  
**EMERGENCY**

NEW ZEALAND



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**Status of this document**

This document is issued by Fire and Emergency New Zealand.

**Recommendations for change**

The document, its content and specific processes are not to be altered except through Fire and Emergency New Zealand document management processes.

Requests or recommendations for changes to this material should be sent to Region Manager, Ngā Tai ki te Puku.

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## Document information

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## Approval

Full Name: David Guard

Title: Region Manager

Date: 27 July 2021



Signature

## Introduction

### How to use this document

The front sections of this document contain information about fire plans in general, and the basics of Fire and Emergency New Zealand's fire control powers and how we use them to reduce the risk of unwanted fires, particularly around fires in the open air.

The back portion of this document contains the locally specific information relevant to this fire plan area, as these fire plans must take the local fire risk conditions into account, and not just apply a blanket standard across the country. All of our areas have different levels of risk, so what may be appropriate for one area of the country may not apply somewhere else.

### Why do we have fire plans?

Fire plans are required by [section 22](#) of the [Fire and Emergency New Zealand Act 2017](#) and the [Fire and Emergency New Zealand \(Fire Plans\) Regulations 2018](#).

According to [Regulation 5](#) of the Regulations, the purpose of a fire plan is to:

- provide transparency and predictability in relation to the use of Fire and Emergency's fire control powers under sections [52 to 58](#) and [62 to 68](#) of the [Fire and Emergency New Zealand Act 2017](#) in each local area; and
- ensure that the particular fire risk conditions in each local area are considered by Fire and Emergency when it establishes policies and procedures for, and exercises fire control powers within, that local area.

This means that we need to explain how we set locally-appropriate triggers for changing fire seasons for outdoor fires to require permits, or to prohibit fires and even restrict activities that may cause unwanted fires, and how we apply our other powers to manage fire hazards or require firebreaks. This helps people to understand what to expect, how to plan for this and what they need to do to comply with any requirements.

### Content of the fire plans

Fire plans must:

- describe the particular fire risk conditions that exist or are likely to exist in the local area. This means that each fire plan is accurate and relevant for its area, and the fire plan can be broken down into specific zones within the area where fire risk conditions or control measures differ.
- set out the policy for fire control in the local area. This sets out when and why we restrict or prohibit fires in the outdoors, or restrict activities that may cause unwanted fires, and manage fire hazards or require firebreaks
- set out the procedures to be followed for fire control in the local area, including details of the processes that Fire and Emergency will follow, and the factors that Fire and Emergency will consider, when deciding to:
  - issue notices of prohibitions or restrictions for fire control under [section 52](#) of the Act
  - declare a prohibited or restricted fire season in relation to the local area, or a part of that area, under [section 56](#) of the Act
  - issue notices in relation to firebreaks under [section 62](#) of the Act
  - issue notices to remove or destroy vegetation or other things on land under [section 65](#) of the Act.

This means that our communities understand how we have come to those decisions, and that we can show that they are evidence-based decisions that don't impact on recreational and economic activities unnecessarily.

A fire plan must be consistent with:

- Fire and Emergency's national strategy
- any local planning by Fire and Emergency in respect of the local area
- any current operational service agreement and memorandum of understanding that Fire and Emergency has with other agencies or people relevant to the local area
- any relevant Fire and Emergency policies.

A fire plan must cover the entire local area that it relates to, but we can break each area down into smaller zones to manage them individually. This ensures that each fire plan is relevant to everywhere within its area.

Fire plans are not about how we fight fires in the local area, or the resources available to do so. This plan is about how, when and why Fire and Emergency will exercise its fire control powers to reduce the incidence of unwanted fires in the area.

## Local area and zones

### Local area

In the context of these fire plans, local area is the area within each Local Advisory Committee's boundaries.

The Fire and Emergency New Zealand (Fire Plans) Regulations 2018 indicate that Fire and Emergency must prepare and issue a fire plan for each local area as soon as possible after the boundaries of the Local Advisory Committee in respect of the local area are set.

In May 2019, the Board of Fire and Emergency New Zealand approved Local Advisory Committee boundaries aligned with the Civil Defence Emergency Management Group (CDEMG) boundaries as originally proposed and publicly consulted, with one modification to include the Tararua District in the Hawke's Bay Local Advisory Committee area.

### Zones

Zones within an area can be based on climatic conditions, geographical features or land use based on previous work on analysing the wildfire threat, or territorial authority, to enable fire seasons to be applied to the zone in a way that makes sense from a fire science point of view, and our ability to communicate where the boundaries are with the public.

## Consultation

Before issuing a fire plan for a local area, or an amended fire plan, Fire and Emergency must:

- publish a notice that:
  - gives an overview of the content of the proposed plan
  - states where you can see and read a copy of the plan
  - specifies how you can make a submission on the plan and where to send your submissions
  - specifies the closing date and time for submissions
- consider every submission received by the closing date and time for submissions.

This notice must be published in the Gazette, or in a newspaper circulating in the local area, or a website.

## **Key stakeholders**

A list of key stakeholders involved in the creation of the plan, those who should contribute to its maintenance and relevant decision making is included as the stakeholder schedules in the local area and zone information in this plan.

## **Review and amendment**

Fire and Emergency may amend a fire plan at any time, but we must review the fire plan for each local area at least once every 3 years, or if there are significant changes to the boundaries of the local area.

When we review the fire plan for a local area, we must confirm that the fire plan remains appropriate for that area; or amend the fire plan as necessary, and consult on changes.

This is the first time that fire plans of this nature have been developed under the new legislation. These plans may be reviewed and amended sooner than the 3 year time limit to ensure we can continue working with stakeholders to improve the plans.

## 4 Rs of emergency management

New Zealand's approach to emergency management can be described by the four areas of activity, known as the '4 Rs' – reduction, readiness, response and recovery.

Fire plans are a part of our work in the Reduction space. Previous fire plans under the old rural fire authorities also had components of Readiness and Response, and that information is now incorporated into other planning work and operational procedures.

Have a look at the range of work that Fire and Emergency does in each of the 4 Rs.



### Reduction

Identifying and analysing long-term risks to human life and property; taking steps to eliminate these risks if practicable, and, if not, reducing their impact and the likelihood of them occurring.

The first of Fire and Emergency's principal objectives is to reduce unwanted fires.

For Fire and Emergency, this work includes:

- our national framework for fire control, which includes these fire plans, and our fire control powers for reducing the likelihood of unwanted fire from the use of fire in the open air, and other causes of wildfire through setting fire seasons, requiring fire permits, firebreaks and fire hazard removal.
- evacuation procedures and evacuation schemes for buildings
- input into building design for fire safety, and our part in the building consent application process
- the national automatic fire alarm system
- influencing policies within standard-setting bodies and with central and local government
- public education campaigns around escape planning, fire safety, and smoke alarms.

## Readiness

Developing operational systems and capabilities before an emergency occurs, including self-help initiatives for the public, specific programmes for emergency services, lifeline utilities and other services.

For Fire and Emergency, this includes:

- establishing and maintaining our response capability (our fire stations and trained people) across the country
- the 111 call centre where the public can report fires and other emergencies
- contact lists and contracts with service providers that we can use in response
- tactical plans (how we plan to respond to a particular site or location)
- community planning
- work with local government around provision of water for firefighting

## Response

Attending incidents and taking immediate action before, during or directly after an incident to protect and preserve life, prevent or limit injury, reduce damage to land or property, protect the environment and help people begin recovery.

For Fire and Emergency, this includes:

- firefighting
- responding to hazardous substance incidents
- rescuing trapped people
- urban search and rescue

It can also include responding to:

- medical emergencies
- maritime incidents
- other rescues
- weather events and disasters
- incidents where substances present a risk to people, property or the environment
- any other situation where we can assist.

## Recovery

Helping people who have suffered loss and trauma to receive the appropriate support. Coordinated efforts and processes to bring about the immediate, medium-term and long-term recovery of a community following a major emergency.

For Fire and Emergency, this includes:

- our immediate actions at emergencies following good incident management practices that minimise the short-term and long-term impact and consequences of the original event
- ensuring those immediately affected by the emergency get the support they need, including making sure people suffering loss and trauma receive appropriate support from the relevant agency.
- In addition, as a precursor to recovery, we support and encourage community pre-planning for major events and support recovery/clean-up activities to strengthen community resilience following an incident.

## Our commitment to working with Māori as tangata whenua

Fire and Emergency recognises the status of Māori as tangata whenua and, as such, the importance of Māori communities as key stakeholders in Fire and Emergency's work.

We recognise:

- Iwi and Māori as community leaders with an important role to play in preventing fires and other emergencies, building community resilience, and informing emergency response
- Iwi as our partners in risk reduction as significant and growing land and forest owners
- Māori are disproportionately affected by unwanted fires, and that needs to change.

By committing to work with tangata whenua, we contribute to a safer environment not only for Māori but for all New Zealand communities.

We will do this by building strong relationships that enable us to engage with iwi and Māori as we design and deliver services. This will require us to engage in culturally appropriate ways. We will strengthen our cultural capability, diversity and inclusion, so that we better reflect and engage with the communities we serve.

## National Framework for Fire Control

Not all fires are unwanted. New Zealand has a long history of using fire as a tool, for land management, or for cooking, comfort and warmth.

The National Framework for Fire Control consists of policies, procedures and tools that enable Fire and Emergency to manage fires – supporting people to safely use fire where appropriate and restricting or prohibiting its use when there is a risk of unwanted fire.

The public face of this is the [Checkitsalright.nz](https://www.checkitsalright.nz) website, the [fire permit application system](#), these fire plans, and additional information on our public website – [fireandemergency.nz](https://www.fireandemergency.nz).

Fire and Emergency has a number of statutory fire control powers that can be applied to help reduce risk, as follows:

- Setting fire seasons
- Prohibiting fire in open air or revoking the prohibition
- Prohibiting or restricting activities or revoking the prohibition or restriction
- Fire permitting
- Control of firebreaks
- Fire hazard removal

## Our policies

The current internal policies and supporting processes that guide our decisions and actions are:

Policy	Detail
Fire seasons, prohibitions and restrictions policy	Relating to sections 52 to 58 of the Act and decisions to: <ul style="list-style-type: none"> <li>• declare or revoke a prohibited or restricted fire season</li> <li>• prohibit fire in open air or revoke a prohibition</li> <li>• prohibit or restrict activities that may cause a fire to start or spread, and revoke prohibition or restriction.</li> </ul>

Policy	Detail
Fire permitting policy	Supporting the policy above and also defining actions for: <ul style="list-style-type: none"> <li>• supporting a member of the public who is applying for a fire permit</li> <li>• assessing a fire permit application</li> <li>• granting or renewing a fire permit</li> <li>• refusing to grant or renew a fire permit</li> <li>• suspending or cancelling a fire permit</li> <li>• operational decisions when responding to an alarm of fire in open air.</li> </ul>
Fire hazard removal policy	Relating to sections 65 to 67 of the Act and decisions about what to do when: <ul style="list-style-type: none"> <li>• a potential fire hazard is reported to Fire and Emergency</li> <li>• we assess a potential fire hazard</li> <li>• we arrange for the removal or destruction of a confirmed fire hazard.</li> </ul>
Compliance and enforcement policy	Covering how we monitor and take action to identify and influence landowners and others to comply with the requirements of the Act and other relevant legislation. This covers activities which: <ul style="list-style-type: none"> <li>• reduce harm from unwanted fire</li> <li>• support the safe use of fire as a land management tool and reduce harm if fire escapes control</li> <li>• minimise avoidance of the Fire Emergency levy</li> <li>• reduce non-compliance with any legislation or regulations under which Fire and Emergency New Zealand has a compliance function.</li> </ul>

**Note:** work is also under way to define policy and guidance for both internal and stakeholder audiences, covering:

Policy	Detail
Firebreaks	Relating to sections 62 to 64 of the Act to support decisions and actions relating to requirements for landholders to: <ul style="list-style-type: none"> <li>• make and clear any firebreak on the landholder's land</li> <li>• remove any vegetation or other thing from an existing firebreak.</li> </ul>

## Fire risk conditions

The circumstances where we can use our fire control powers to prohibit fire and or restrict other activities are defined in the Act as when:

- fire risk conditions exist or are likely to exist in the area; and
- the prohibition or restriction is necessary or desirable for fire control.

We also take these into account when setting fire seasons.

Fire risk conditions are defined in the Act as weather or other conditions that will, or are likely to, endanger persons or property by increasing the risk of the outbreak or spreading of fire.

Other conditions, considered to be fire risk conditions for the purposes of exercising our fire control powers, include:

Condition	Description
Fire weather science	The NZ Fire Danger Rating System includes measures, such as: <ul style="list-style-type: none"> <li>• Build-up Index (BUI)</li> <li>• Initial Spread Index (ISI)</li> <li>• Fire Weather Index (FWI)</li> <li>• Grass curing percentage</li> <li>• Fine Fuel Moisture Code (FFMC)</li> <li>• Drought code (DC).</li> </ul>
Topography	Factors that influence how a fire spreads, including: <ul style="list-style-type: none"> <li>• steepness of slope</li> <li>• direction fire is facing, i.e. aspect</li> <li>• terrain features, e.g. gullies and chimneys.</li> </ul>
Fuel behaviour models	The characteristics of fuel, or vegetation, that contribute to fire ignition and spread.
History of fires	History of recent fires in the area, based on available fire data.
Socio-economic factors	Factors that influence the likelihood of fires being lit for cooking purposes and to dispose of rubbish in backyards, e.g. absentee owners and lifestyle blocks burning during holiday season. Expectations of the public to be able to light certain types of fires, e.g. cultural cooking fires.
Time of year	Time of year, e.g. land clearing forestry, land clearing hill and high country, late winter to spring.
Public knowledge – awareness of the risks	The expected public awareness of risks may be low, e.g. a large influx of visitors during summer holiday periods, who may reasonably be expected to have little understanding of the risks of lighting fires in an area.
Proximity to property or other values	The closeness of property or other valuables to fire, for example: <ul style="list-style-type: none"> <li>• life values, e.g. size of land parcels in an urban area</li> <li>• distance from commercial forestry.</li> </ul>
Ability to provide an effective response	Factors that contribute to our ability to respond to an out of control fire include: <ul style="list-style-type: none"> <li>• availability of response resources, i.e. people and equipment</li> <li>• isolation</li> <li>• accessibility issues</li> <li>• availability of water supplies.</li> </ul>

Condition	Description
Impacts from natural disasters	Natural disasters are likely to influence resource availability and the likelihood of fires.
People	The presence of people increases the risk of fire.
Impact of other events that increase the risk of the outbreak or spread of fire	Events that increase the risk of potential fire, e.g. the rupture of an oil pipeline.

## Fire seasons

Fire seasons are used to inform people about the requirements for or restrictions on lighting fires in the open air, and to manage the use of fire to protect communities from the consequences of unwanted fire.

Fire and Emergency can declare or revoke a prohibited or restricted fire season in an area, and uses its Fire seasons, prohibitions and restrictions policy and associated processes to manage this.

Fire seasons are applied to geographic zones based on:

- the fire environment (fuel types, curing, weather, topography, historic trends)
- fire climatic zones
- topographical boundaries/features (rivers, roads, coast lines, forest and national park boundaries)
- fire control considerations.

One of three types of fire season is in force at any time in an area or zone:

### Open fire season



Fires may be lit in open air, without restriction. Applies whenever there is not a prohibited or restricted fire season in place.

### Restricted fire season



Lighting a fire is riskier than usual. A fire permit is required and may also have specific conditions to make sure fires can be safely lit and remain under control.

### Prohibited fire season



Lighting fires in the open air is not permitted. Existing fire permits are suspended, though fire permits may still be granted in exceptional circumstances.

It is important that stakeholders know what the current fire season is, and understand how they can comply with the requirements.

To see what the current fire season is within a local area (or zone within an area) go to [checkitsalright.nz](https://checkitsalright.nz).

## Open fire seasons

We use an open fire season when the fire danger is consistently low enough that Fire and Emergency does not need to apply additional controls on when people can light fires in the open air.

Note that this does not mean that you can light fires anywhere you want to. Department of Conservation, local council or regional council bylaws or air quality plans may apply additional restrictions, or not allow you to light a fire at all.

You must also have permission from the landowner or occupier to light a fire, even in an open fire season.

We still like to hear from you if you are lighting a large fire, e.g. for land clearing or burning crop stubble, so that we can share advice on how and when to conduct your fire safely.

## Restricted fire seasons

We use restricted fire seasons when the fire danger has increased enough that we need more control over where, when and how people use fire.

Requiring permits for particular types of fires in the open air means that we can understand where and when fire is being used, so that our fire brigades don't need to respond unnecessarily.

It also gives us an opportunity to give advice about how the fire can be conducted safely, or we can apply conditions around when the fire can be lit, how big it can be, or any other requirements that reduce the chance of the fire escaping control.

## Prohibited fire seasons

When the fire danger reaches higher levels, we need to stop people from lighting fires that may escape, as the fire behaviour during these conditions makes fires very difficult and dangerous to contain, control and extinguish.

Certain types of fires may still be used, but people need to be very careful with fire during these times. See the section on [Authorised fire types in a prohibited fire season](#).

## Trigger thresholds for changing fire seasons

The New Zealand Fire Danger Rating System and its component Fire Weather System provide us with a consistent, scientific way to monitor the fire danger in an area.

Trigger thresholds, based on relevant fire weather measurements and values are set in consultation with stakeholders for declaring restricted and prohibited fire seasons within the fire plan area or fire permit zone within that area. The trigger thresholds identify when prevailing weather conditions create ongoing potential for problem fires.

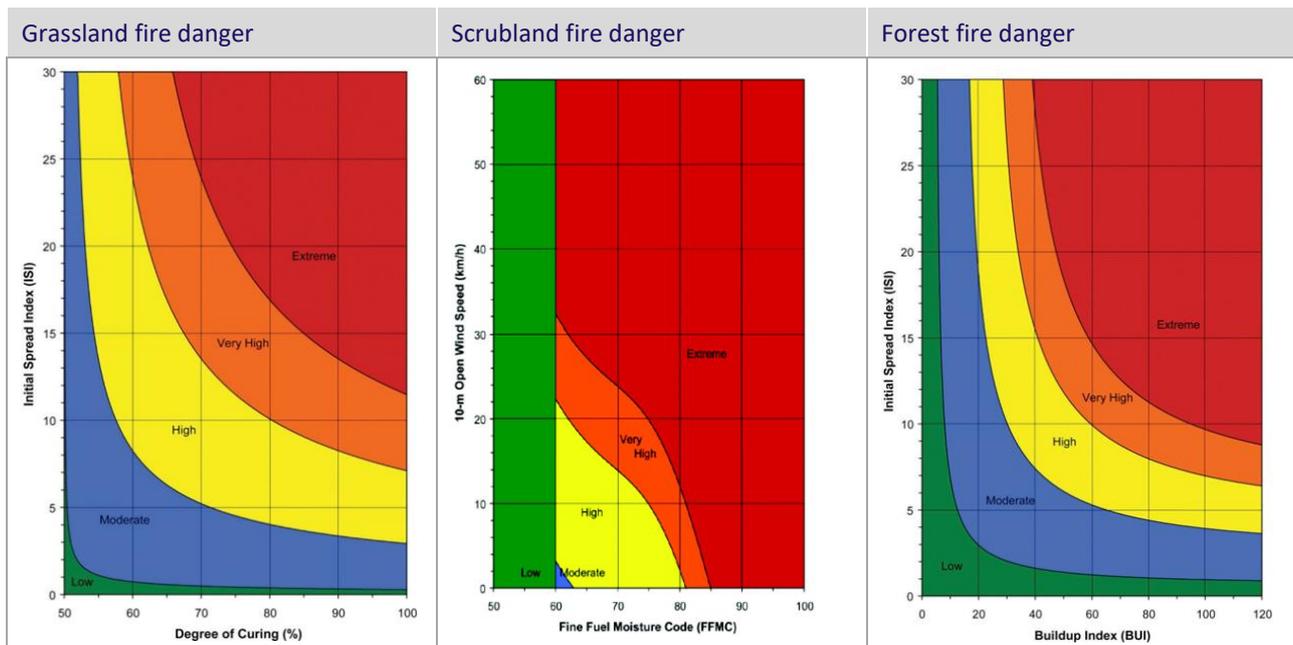
The trigger thresholds make use of:

- the Remote Automatic Weather Station (RAWS) climatology data for the fire plan area or zone.
- historical fire data for the fire plan area or zone.

Other factors such as resource availability, other emergency events etc., may also feed into a decision to declare or revoke a fire season earlier or later than the trigger threshold would indicate.

Forecast weather trends must be taken into consideration when declaring a change in fire season. An upcoming rain event may defer a change in fire season, or forecast dry weather and strong winds may indicate a need to change fire season days before the trigger threshold would otherwise be reached.

Locally agreed thresholds will be listed in the zone information in this document.



## Prohibiting fires in open air (section 52)

There are times when Fire and Emergency may need to prohibit fires in the open air, outside of the usual fire season changes. This control is used very rarely, in exceptional circumstances, for example when:

- large or multiple incidents occur that put firefighting resources under strain
- extreme fire weather conditions occur during a restricted fire season, e.g. strong dry winds, high temperatures associated with very low humidity
- emergency events occur, e.g. the rupture of the Marsden Point fuel pipeline, increasing the fire hazard in a specific area.

We can only prohibit fires in the open air when fire risk conditions exist or are likely to exist in the area, and the prohibition or restriction is necessary or desirable for fire control.

Fire and Emergency may also prohibit fires in the open air while the Epidemic Preparedness (COVID-19) Notice 2020 is in force, without needing to consider fire risk conditions or other factors. This might happen if our response capabilities are affected by COVID, and we aren't able to respond effectively if there is an unwanted fire.

Fire and Emergency can create temporary zones that are smaller than the zones in this fire plan for the purposes of limiting the impact of prohibiting fires in open air under [section 52](#).

If someone breaches the ban, they can be charged under [section 54](#) of the Fire and Emergency New Zealand Act 2017.

## Trigger thresholds for prohibiting fire in open air

We can use the same Fire Weather System trigger thresholds for prohibiting fires in the open air under [section 52](#) as we do for changing to a prohibited fire season, but use [section 52](#) when the fire risk conditions are not expected to last long enough to make changing to a prohibited fire season practical.

If Fire and Emergency has come to an agreement with stakeholders on other thresholds for when to implement a [section 52](#) prohibition of fire in open, these will be included in the zone information in this document.

## Restricting and prohibiting activities (section 52)

There are times when fire risk conditions are elevated to an extent that certain activities may cause a fire to start or spread. Examples of these activities include but are not limited to:

- roadside mowing
- cutting or welding operations outdoors that involve the use of portable gas, disc grinder or arc welding equipment that produces sparks, flames or heat, generally known as 'hot works'
- chainsaw thinning to waste/tree felling
- mowing, ploughing or harrowing fields
- use of fireworks and flying lanterns
- firing tracer bullets.

[Section 52](#) of the Act allows us to prohibit or restrict one or more activities in an area or areas, when our assessment is that:

- the activity, (including access to an area) may cause a fire to start or spread and adequate controls are not available
- [fire risk conditions](#) exist or are likely to exist in the area
- the prohibition or restriction is necessary or desirable for fire control purposes
- there is an inability to adequately mitigate the assessed risk.

Prohibition or restriction means:

When an activity is...	It means the activity...
Prohibited	must not be undertaken at all by any person while the prohibition is in effect (except if it is an excluded activity that relates to the carrying out of essential services in the area).
Restricted	can be undertaken subject to certain conditions, such as restrictions on: <ul style="list-style-type: none"> <li>• the times of the day</li> <li>• the manner in which it is undertaken.</li> </ul>

If we have restricted or prohibited access to a location under [section 52](#), we can't prevent someone who lives or works in the location from entering. [Section 52](#) also doesn't prevent someone from carrying out essential services where it applies.

Essential services are:

- for the supply and distribution of food, water, fuel, power, and other necessities
- for the maintenance of transport and communication facilities that are essential to the well-being of the community
- for the maintenance of the health of the community
- for the maintenance of law and order, public safety, and the defence of New Zealand
- for the preservation of property at immediate risk of destruction or damage.

Fire and Emergency can create temporary zones that are smaller than the zones in this fire plan for the purposes of limiting the impact of restricting or prohibiting activities under [section 52](#).

If someone fails to comply with the restriction or prohibition, they can be charged under [section 54](#) of the Fire and Emergency New Zealand Act 2017.

## Trigger thresholds for restricting or prohibiting activities under section 52

Some industries have their own restrictions that they place on themselves when fire risk increases. However, when these voluntary restrictions are not enough to reduce the risk of a fire starting or spreading, or we need to restrict or prohibit the public from the same high risk activities, then we will use [section 52](#) to apply the restrictions or prohibitions to everyone within the zone.

Our policy for fire seasons, prohibitions and restrictions says that we only prohibit or restrict activities if we have engaged with stakeholders and they are unable to satisfactorily mitigate the identified risks.

Legally restricting or prohibiting activities can have a significant economic impact, so should not be done without due consideration.

If Fire and Emergency has come to an agreement with stakeholders on set thresholds for when to implement a [section 52](#) restriction or prohibition of activities, these will be included in the zone information in this document.

## Activities and risk mitigation

### Forestry operations

The NZ Forest Owners Association have developed the [Forest fire risk management guidelines](#) (2018) which contains trigger point tables and what fire prevention actions are required during different fire danger levels. These guidelines are supported by Fire and Emergency.

If local trigger values have been set, they will be listed in the zone information in this document. NIWA's website will be updated to display the levels decided locally.

### Powerline auto-reclosers

Most power companies use a computer-controlled auto recloser system which attempts to reconnect the power up to three times following a fault before a technician needs to be sent. If the fault was the result of a downed wire(s), this creates three potential sparking events.

If local trigger values have been set, they will be listed in the zone information in this document. NIWA's website will be updated to display the levels decided locally.

Power companies also make use of other reduction activities, following the [Electricity \(Hazards from Trees\) Regulations 2003](#), such as trimming trees around power lines, providing fault reporting to public, undergrounding power lines, and providing tree planting guidance.

### Hot works

This includes activities such as welding, grinding, chain sawing, metal cutting, mowing and railway track maintenance.

If local trigger values have been set, they will be listed in the zone information in this document. NIWA's website will be updated to display the levels decided locally.

Fire and Emergency will work with Waka Kotahi (NZTA) and local councils on roadside mowing issues during days with elevated fire danger, and changing operations to suit conditions.

We will also work with Federated Farmers through the Land Management Forums to discuss the approach to fire measures, the use of machinery and equipment during high fire danger periods and the potential effect on local landholders.

## Fireworks

Fire and Emergency does not regulate the use of fireworks when fire risk conditions are not elevated.

Sale of fireworks is regulated by the [Hazardous Substances \(Fireworks\) Regulations 2001](#) and storage by the [Health and Safety at Work \(Hazardous Substances\) Regulations 2017](#).

Council bylaws may limit where and when fireworks may be used.

When fire risk conditions are elevated, Fire and Emergency can restrict or prohibit the use of fireworks as an activity under [section 52](#) of the Fire and Emergency New Zealand Act 2017.

This prohibition does not include pyrotechnics displays as these are permitted activities that are assessed by risk management staff as part of their application for approval of the pyrotechnics display.

Whether fireworks should be banned is a decision for Government, and our work related to fireworks will continue to reflect decisions made by central Government.

Fire and Emergency is responsible for promoting fire safety, and provides advice to the public to promote the safe use of fireworks. We recommend people attend publicly organised displays where possible.

## Communicating changes in fire seasons and restrictions or prohibitions

It's important that people planning to light fires in the open air know whether they can do so safely and legally, so they need to know what the current fire season is in the area, whether any other prohibition applies, and whether a permit is required.

Fire season changes, and restrictions and prohibitions under [section 52](#) of the Act, are publicly notified to our communities, stakeholders and partners in a number of ways.

Modes of communication can include, but are not limited to:

- Direct contact with our partners and stakeholders, including email
- Local newspaper and radio ads
- Social media and media
- Email and text directly to permit holders
- Check It's Alright website [www.checkitsalright.nz](http://www.checkitsalright.nz) or information available by phoning 04 496 3600
- Fire danger or fire season signs – these are changed to reflect season status with additions of “Fire by permit only” or “Total fire ban” or similar messaging.

During periods of elevated and extreme fire danger days, we increase our communication of fire safety and prevention messages to build awareness of the dangers of wildfires and promote positive behaviour changes.

Messaging using traditional and digital media, such as social media and on-demand video can be targeted at affected areas at effective times.

When a fire season change affects public conservation land (PCL), we must also notify the Department of Conservation (DOC) of any intention to declare or revoke a prohibited or restricted fire season on public conservation land. This must also be followed up with a written notification.

Department of Conservation informs visitors of the controls or bans on lighting fires, including for cooking, warmth and campground fires, through notices and advertising.

## Fire permits

The information included with a fire permit helps people understand how to light a fire safely, and to reduce the risk of their fire burning out of control. Fire permits carry conditions which vary based on the current local fire risk conditions.

Fire risk conditions vary by time and other factors such as fuel, weather and topography, so the acceptable conditions for burning are set for each fire permit.

Fire permits may also be suspended or cancelled in certain circumstances, such as: where fire risk conditions change, for fire control purposes, or as fire seasons change/prohibitions are imposed.

No liability is imposed on Fire and Emergency because of the granting of a fire permit, under [section 190\(8\)](#) of the Act.

## Council bylaws, regional plans, legal covenants or restrictions

Fire and Emergency must only consider the fire risk conditions when issuing permits. We can't apply other organisations' requirements when issuing permits, so even if Fire and Emergency has issued a fire permit, you may not be allowed to light your fire due to other requirements.

Even if a fire permit is not required from us, due to an open fire season etc., you may not be able to light fires in some places.

Council bylaws and regional plan rules relating to smoke and air pollution must also be followed.

Managing smoke nuisance comes under local government jurisdiction and not Fire and Emergency, unless the smoke is an immediate threat to life, however we will still promote good practice and suggest alternatives.

There may also be legal covenants or restrictions which restrict the ability to light a fire in some areas, regardless of the fire season. For example, if there are power pylons or other infrastructure nearby.

You will also need private landowner or occupier approval before lighting a fire, even if Fire and Emergency has issued a fire permit.

If there is signage in a location that says to light no fires or equivalent, then you must follow those instructions.

Where relevant, information about applicable bylaws and regional plans is included in the area overview of this document.

## When a permit is needed

The need for a fire permit is based on:

- type of fire
- the fire season or restrictions or prohibitions on fires in the open air.

## Fire types

Some fire types may be allowed in restricted and prohibited fire seasons by making them:

- Authorised (no permit required)
- Permit required

For more information on fire types, see [Open air fires – rules and permits](#) on the Fire and Emergency website [www.fireandemergency.nz](http://www.fireandemergency.nz).

## Authorised fire types, descriptions and conditions in a restricted fire season

Authorised fire types in a restricted fire season, i.e. those fire types not requiring a fire permit because they are not considered 'fires in open air' are listed below:

Fire type	Description and conditions
Gas-operated appliances	<p>Manufactured gas-operated appliances, such as barbeques, outdoor fireplaces and outdoor gas heaters.</p> <p>Find out more about the safe use of <a href="#">barbeques and gas cylinders</a> and <a href="#">outdoor gas-operated appliances</a>.</p>
Charcoal barbeques or grills	<p>Barbeques or grills that use either charcoal briquettes or natural lump charcoal as their fuel source.</p> <p>Condition:</p> <ul style="list-style-type: none"> <li>Don't use on an apartment balcony, deck, under a roof overhang or within other enclosed areas.</li> </ul> <p><i>If you cannot meet this condition, you must apply for a permit.</i></p>
Wood-fire pizza oven	<p>Also known as wood ovens, these are ovens that use wood fuel for cooking.</p> <p>Conditions:</p> <ul style="list-style-type: none"> <li>Don't light your fire within three metres of any part of a building, hedge, shelter belt or any combustible material.</li> <li>In case your fire gets out of control, you must have a suitable way to extinguish it within five metres of your pizza-oven, such as a water hose, mechanical digger, or water sprayer.</li> </ul> <p><i>If you cannot meet these conditions, you must apply for a permit.</i></p>
Chiminea	<p>A freestanding front-loading fireplace or oven with a bulbous body, and usually has a vertical smoke vent or chimney.</p> <p>Conditions:</p> <ul style="list-style-type: none"> <li>Don't light your fire within three metres of any part of a building, hedge, shelter belt or any combustible material.</li> <li>In case your fire gets out of control, you must have a suitable way to extinguish it within five metres of your chiminea, such as a water hose, mechanical digger, or water sprayer.</li> </ul> <p><i>If you cannot meet these conditions, you must apply for a permit.</i></p>
Hāngī, umu, braai and lovo cultural cooking fires	<p>Conditions:</p> <p>Your fire area must be less than two square metres.</p> <ul style="list-style-type: none"> <li>Don't light your fire within three metres of any part of a building, hedge, shelter belt or any combustible material.</li> <li>In case your fire gets out of control, you must have a suitable way to extinguish it within five metres of your cultural fire, such as a water hose, mechanical digger, or water sprayer.</li> </ul> <p>Find out more about the safe use of <a href="#">cultural fires</a>.</p> <p><i>If you cannot meet these conditions, you must apply for a permit.</i></p>

Fire type	Description and conditions
Braziers	<p>A container for hot coals – usually an upright standing or hanging metal bowl or box.</p> <p>Conditions:</p> <ul style="list-style-type: none"> <li>• Your fire area must be less than 0.5 square metres.</li> <li>• Don't light your fire within three metres of any part of a building, hedge, shelter belt or any combustible material.</li> <li>• In case your fire gets out of control, you must have a suitable way to extinguish it within five metres of your brazier, such as a water hose, mechanical digger, or water sprayer.</li> </ul> <p><i>If you cannot meet these conditions, you must apply for a permit.</i></p>
Fire pits/bowls	<p>A pit dug in the ground made from stone, brick or metal or a bowl on an upright stand, for recreational use.</p> <p>Conditions:</p> <ul style="list-style-type: none"> <li>• Your fire area must be less than 0.5 square metres.</li> <li>• Don't light your fire within three metres of any part of a building, hedge, shelter belt or any combustible material.</li> <li>• In case your fire gets out of control, you must have a suitable way to extinguish it within five metres of your fire pit/bowl, such as a water hose, mechanical digger, or water sprayer.</li> </ul> <p><i>If you cannot meet these conditions, you must apply for a permit.</i></p>
Open drum and manufactured incinerators	<p>A drum or container with a mesh or solid lid designed to prevent the escape of hot ash or fire, and designed exclusively for incineration.</p> <p>Conditions:</p> <ul style="list-style-type: none"> <li>• Don't light your fire within five metres of any part of a building, hedge, shelter belt or any combustible material.</li> <li>• In case your fire gets out of control, you must have a suitable way to extinguish it within five metres of your incinerator, such as a water hose, mechanical digger, or water sprayer.</li> </ul> <p><i>If you cannot meet these conditions, you must apply for a permit.</i></p>

### Authorised fire types on public conservation land in a restricted fire season

Authorised fire types on public conservation land (PCL) in a restricted fire season, i.e. those fire types not requiring a fire permit because they are not considered 'fires in open air' are listed below:

Fire type	Description and conditions
Gas-operated appliances	<p>Manufactured gas-operated appliances, such as barbeques, outdoor fireplaces and outdoor gas heaters.</p> <p>Find out more about the safe use of <a href="#">barbeques and gas cylinders</a> and <a href="#">outdoor gas-operated appliances</a>.</p>
Pressurised liquid cookers	Small cookers that use kerosene or other similar liquids as fuel.
Campfires in a permanent fireplace	Positioned and constructed by the Department of Conservation (DOC) to minimise the threat of fire spread and located within formally established DOC overnight campsites or daytime amenity areas.
Cooking and warming fires	<p>Fires lit in the backcountry (over one-hour walking time from the nearest road end) of public conservation land.</p> <p>Conditions:</p> <p>The fire must not be:</p> <ul style="list-style-type: none"> <li>• within three metres of any tree or any place underneath overhanging vegetation; and</li> <li>• within three metres of any log or any dry vegetation; and</li> <li>• lit unless and until the ground surface within three metres of the site of the fire has been cleared of all combustible material; and</li> <li>• lit where notices and advertising are present which specifically prohibit the lighting of fires or specify the lighting of fires only in other types of receptacles or places; and</li> <li>• lit during a prohibited fire season; and</li> <li>• lit in conditions where wind or other factors may cause the fire to spread to surrounding flammable material.</li> </ul> <p>Find out more about the safe use of <a href="#">campfires</a>.</p>

## Authorised fire types, descriptions and conditions in a prohibited fire season

Authorised fire types in a prohibited fire season, i.e. those fire types not requiring a fire permit because they are not considered 'fires in open air' are listed below

Fire type	Description and conditions
Gas-operated appliances	<p>Manufactured gas-operated appliances, such as barbeques, outdoor fireplaces and outdoor gas heaters.</p> <p>Find out more about the safe use of <a href="#">barbeques and gas cylinders</a> and <a href="#">outdoor gas-operated appliances</a>.</p>
Charcoal barbeques or grills	<p>Barbeques or grills that use either charcoal briquettes or natural lump charcoal as their fuel source.</p> <p>Condition:</p> <p>Don't use on an apartment balcony, deck, under a roof overhang or within other enclosed areas.</p> <p><i>If you cannot meet this condition, you must apply for a permit.</i></p>
Wood-fire pizza oven	<p>Also known as wood ovens, these are ovens that use wood fuel for cooking.</p> <p>Conditions:</p> <ul style="list-style-type: none"> <li>• Don't light your fire within three metres of any part of a building, hedge, shelter belt or any other combustible material.</li> <li>• In case your fire gets out of control, you must have a suitable way to extinguish it within five metres of your pizza-oven, such as a water hose, mechanical digger, or water sprayer.</li> </ul> <p><i>If you cannot meet these conditions, you must apply for a permit.</i></p>
Chiminea	<p>A freestanding front-loading fireplace or oven with a bulbous body, and usually has a vertical smoke vent or chimney.</p> <p>Conditions:</p> <ul style="list-style-type: none"> <li>• Don't light your fire within three metres of any part of a building, hedge, shelter belt or any other combustible material.</li> <li>• In case your fire gets out of control, you must have a suitable way to extinguish it within five metres of your chiminea, such as a water hose, mechanical digger, or water sprayer.</li> </ul> <p><i>If you cannot meet these conditions, you must apply for a permit.</i></p>
Hāngī, umu, and lovo and cultural cooking fires	<p>Conditions:</p> <p>Your fire area must be less than two square metres.</p> <p>Don't light your fire within three metres of any part of a building, hedge, shelter belt or any other combustible material.</p> <p>In case your fire gets out of control, you must have a suitable way to extinguish it within five metres of your cultural fire, such as a water hose, mechanical digger, or water sprayer.</p> <p>Find out more about the safe use of <a href="#">cultural fires</a>.</p> <p><i>If you cannot meet these conditions, you must apply for a permit.</i></p>

## Authorised fire types on public conservation land in a prohibited fire season

Authorised fire types on public conservation land in a prohibited fire season, i.e. those fire types not requiring a fire permit because they are not considered ‘fires in open air’ are listed below:

Fire type	Description and conditions
Gas-operated appliances	Manufactured gas-operated appliances, such as barbeques, outdoor fireplaces and outdoor gas heaters. Find out more about the safe use of <a href="#">barbeques and gas cylinders</a> and <a href="#">outdoor gas-operated appliances</a> .
Pressurised liquid cookers	Small cookers that use kerosene or other similar liquids as fuel

## Permits in prohibited fire seasons or during prohibitions under section 52

Fire and Emergency may grant permits during a prohibited fire season, or when there is a prohibition under [section 52](#) of the Act, when the fire or activity is necessary to prevent, reduce, or overcome any hazard to life or because of any other serious emergency.

We may grant fire permits during a prohibited fire season if weather or other conditions have temporarily reduced the fire hazard, so as to make it apparently safe to light a fire.

Permits issued in a prohibited fire season (e.g. for biosecurity reasons) remain active when the fire season changes.

## Applying for a permit

When a fire permit is required, or if you’d like to check whether you need a permit, you can apply:

- Online through Fire and Emergency’s fire permitting system – [firepermit.nz](https://firepermit.nz)
- Over the phone -0800 658 628 - Your application is then completed in the online system on your behalf.
- In person, by asking local Fire and Emergency fire permitting personnel for a fire permit.
- By email or post, using the manual [fire permit application form](#). You can print and complete the form by hand, or complete the editable pdf and send it back to us.

## Assessment

The fire permit assessors will make a risk-based decision about whether a desk-based assessment or an on-site inspection of the burn location is required before deciding to grant or refuse the fire permit.

Note: Where an application has multiple burn locations, each location must be considered.

Permit applications must be inspected if the assessor has insufficient information to make a desk-based assessment, or where any of the following apply to the proposed fire:

- it is during a prohibited fire season
- it requires a burn plan
- it is in a location where the predominant fuel type is considered to be of high flammability
- it is in a location that is adjacent to areas of significant commercial or environmental values
- it involves multiple fires burning at the same time in different locations on a property
- it is located on steep or complex terrain; or
- it involves burning large amounts of material unless the applicant has a history of successfully managing similar fires.

Additional factors that can be considered to be fire risk conditions or relevant fire control matters when assessing a fire permit application are:

- the environment around the burn site
- the actual site area and boundaries of the proposed burn
- other property and/or values at risk from a possible escaped fire
- other relevant hazards
- time of ignition, light up sequence and method of the proposed fire
- potential fire behaviour and rate of fire spread
- firebreaks around the area to be burnt
- resources available to carry out the burn safely and effectively
- the applicant's understanding of the risks associated with the proposed fire, and their ability to manage those risks effectively.

Prescribed burn plans may be required for complex and higher-risk burns, e.g. land clearing. They help the person proposing to burn to go through a planning process and consider how to undertake the proposed fire safely.

Developing the [prescribed burn plan](#) is the responsibility of the applicant, however we can provide help and support on what the plan should contain in order to undertake the proposed fire safely.

## Mandatory conditions

Every permit must contain standard conditions that are required by the [Fire and Emergency New Zealand \(Fire Permits\) Regulations 2017](#) and cannot be removed. These are:

- You must not light a fire in fire risk conditions that make it likely that the fire will spread beyond the limits of the location or property specified in the permit as the location of the fire.
- If this permit was issued for a proposed fire in an area which is in a restricted fire season:
  - it is suspended if we declare a prohibited fire season or prohibit fire in open air
  - you must, immediately before lighting a fire, make reasonable efforts to confirm that, in the location of the fire:
    - no prohibited fire season is in place; and
    - no prohibition on the lighting of fires in open air is in place.

If the fire permit is issued when fire has been prohibited in open air ([section 52](#) (1) of the Act) the following condition must be included on the permit:

- You must, immediately before lighting a fire, make reasonable efforts to confirm that no restricted or prohibited fire season under [section 56](#) (1) of the Act is in place in the location of the fire.

The permit must also include a condition to notify the Communications Centre immediately prior to lighting the fire, with the relevant phone number, for all fire permits where the fire is likely to be noticed by the public and reported as a 111 call, e.g. where the fire is close to a road or to other houses or buildings, or the fire covers a large area such as land clearing.

When our Communication Centre receives the notification from the fire permit holder they are able to flag the location in their system so that if a 111 call is received it is clear there is a permitted fire.

## Firebreaks

Fire and Emergency has the authority under [section 62](#) of the Act to require landholders to make or clear firebreaks on the landholder's land, or keep them clear, if we think it's needed for fire control. This can include green firebreaks of strips of low-flammability, or removing all vegetation down to mineral earth.

We plan to develop a guideline to provide clarity around the times and circumstances when applying this power may be necessary. Our approach is to work with affected landholders to try to reach a voluntary solution before we would use our powers to require firebreaks.

This power relates to making and clearing firebreaks outside of incident response – before a fire happens. Our powers during response in [section 43](#) allow us to create firebreaks as needed to prevent the spread of fire.

## Fire hazard removal

If Fire and Emergency reasonably consider that vegetation, or some other thing, is a fire hazard, meaning that it is likely to endanger people or property by increasing the risk of outbreak or spread of fire, we can require that the vegetation or thing be removed or destroyed.

We will work with affected people to fix the issue first, but Fire and Emergency has the authority under [section 65](#) of the Fire and Emergency New Zealand Act 2017 to legally require action. You then have one month to fix the problem, although you can appeal against the requirement. Any appeal must be made within 14 days and will be handled through Fire and Emergency's dispute resolution scheme.

Our fire hazard removal powers apply to land, but not to anything on or inside a building. Local councils have the authority to address fire risk related to buildings, such as hoarding.

If it's urgent (an imminent threat) we can tell you, and immediately fix the problem ourselves in order to keep people and property safe.

## Reporting fire hazards

Anyone who becomes aware of a fire hazard or is worried about the potential of something being a fire hazard can report it to Fire and Emergency – see [Submit a Fire Hazard Assessment Request](#) at [www.fireandemergency.nz/at-home/fire-hazards-in-your-community/](http://www.fireandemergency.nz/at-home/fire-hazards-in-your-community/) for the Potential Fire Hazard Advice form.

## Assessment of fire hazards

Fire and Emergency will assess whether there is a potential for the fuel to cause harm or damage to people or property if a fire starts. We will assess the likelihood of a fire starting and the consequences in terms of risk to human life, structures and other values.

We use an assessment tool to provide a structured framework for determining whether:

- it is appropriate for us to exercise our fire hazard removal powers under [sections 65–68](#) of the Act
- providing education to the complainant or occupier/owner of the location of the potential fire hazard on how to mitigate risks from fires is more appropriate
- the matter should be referred to another jurisdiction
- no further action is required.

## Initial review

The assessor starts by answering four key questions:

- Is the potential hazard: trees close to power lines, or hoarding inside a building? If yes, then the hazard is referred to the relevant lines company or local council for action.
- Is the material involved likely to pose a risk to life or property through ignition without spreading? This covers fuel types that are likely to endanger adjacent or downwind properties (either through creating significant health concerns or possible contamination damage), without spreading. This could be due to smoke toxicity or high intensity of burning.
- Is there sufficient material of appropriate type and composition to support a fire spreading to adjacent property or values? This captures the spread potential, taking into consideration the physical properties of the fuel as well as the general topography and onsite conditions. That includes continuity, size and shape, fuel load and flammability, as well as likely direction of fire travel.
- Is the burning material likely to produce enough heat to cause damage to property? Gives consideration to the fire having sufficient energy to actually cause damage to property if spread to it, or to compromise the health of property users.

## Risk assessment matrix

If it's appropriate, we then use a risk assessment matrix. This involves:

- assigning a risk of ignition rating, where 'rare' is a low rating and 'almost certain' is a high rating
- assigning a likely consequence rating for each component, and using the highest value of:
  - human life at risk
  - structure at risk
  - other values at risk
- using the risk of ignition and likely consequence ratings to determine the risk assessment score in the matrix

		Likely consequence (highest consequence rating)				
		1	2	3	4	5
Risk of ignition rating	5	5	10	15	20	25
	4	4	8	12	16	20
	3	3	6	9	12	15
	2	2	4	6	8	10
	1	1	2	3	4	5

- using the risk assessment matrix score to determine the next course of action.

Score	Next course of action
20, 25	Must issue a <i>Fire hazard removal notice (s 65)</i> . Consider if an <i>Imminent danger notice (s 68)</i> is appropriate.
15, 16	Consider issuing a <i>Fire hazard removal notice (s 65)</i> , otherwise provide information/education to the occupier/owner /complainant on how to mitigate risks from fire.
10, 12	Provide information/education to occupier/owner/complainant on how to mitigate risks from fire.
6, 8, 9	Consider providing information/education to occupier/owner/complainant on how to mitigate risks from fire.
1–5	No further action.

## Outcomes from the fire hazard assessment

The assessment will recommend one of the following courses of action:

1. No further action, because the vegetation or other thing does not present a fire hazard. The matter may be referred to another agency such as the local council if appropriate, e.g. hoarding or vermin infestation.
2. Providing education and information to the occupier or owner of the land, and/or to the complainant, on how to mitigate any risks from fire, where the notice threshold has not been reached but the assessment indicates that proactive action would be helpful.
3. Providing the occupier or owner with the opportunity to voluntarily mitigate the risk within an appropriate time period, as the threshold for issuing a Fire hazard removal notice ([section 65](#)) has been met. If they won't do this voluntarily, we will issue a Fire hazard removal notice ([section 65](#)) to the occupier or owner of the land. The notice gives them one month to remove or destroy the vegetation or other thing increasing the risk of the outbreak or spread of fire.
4. Providing verbal notice to the owner or occupier of the land that we are taking immediate action to remove or destroy any vegetation or other thing on the land, that is a source of imminent danger, under [section 68](#). This power would only be used where there is an 'almost certain' likelihood of a fire starting or spreading at any moment, which would put life or property at risk. Note: This power will be used very rarely.

## Powers of entry

We will not enter a property (other than going to the front door) without permission from the occupier.

If permission is not granted or an occupier cannot be located, we will assess the potential fire hazard from outside of the property or speak with the occupier of the neighbouring property to request access to better view the potential fire hazard.

If we need to, a Fire and Emergency inspector can enter and inspect land that is not a home or marae (or a building associated with a marae) in order to determine whether certain materials (including timber, dry plant cuttings and other flammable material) are being stored outside a building in a way that creates a fire hazard to the building, another building, or to any road or other public place (see [regulation 13\(4\)](#) of the [Fire and Emergency New Zealand \(Fire Safety, Evacuation Procedures, and Evacuation Schemes\) Regulations 2018](#)).

A Fire and Emergency inspector must obtain a warrant to enter and inspect land that is a home or marae (or a building associated with a marae).

We can take photographs of private land (or things on private land) from public land, so long as we don't take pictures of an area or thing that a person can reasonably expect to be private (e.g. a photo that includes a view into a shower or a secluded area where someone is sunbathing).

## Fire hazard removal notice (section 65)

Fire hazard removal notice ([section 65](#)) is formal written notification under [section 65](#) of the Act to an occupier or owner of land that they must remove or destroy the 'vegetation or other thing' that has been assessed as meeting the threshold for issuing a notice.

The notice:

- describes the vegetation or other thing that must be removed or destroyed, including a map if practicable identifying the specific location or extent of the vegetation or other thing
- explains the risk that Fire and Emergency reasonably considers that the vegetation or other thing presents
- specifies the actions that must be taken to mitigate the fire hazard risk, e.g. how much vegetation must be removed or destroyed.

We will always attempt to negotiate with the occupier or owner to give them an opportunity to fix the issue voluntarily, before we go with issuing a fire hazard removal notice.

The occupier of the land where the fire hazard is located is primarily responsible for its removal or destruction. If the land is unoccupied, then the responsibility passes to the owner of the land.

Occupier, in relation to any place or land, means any person in lawful occupation of that place or land; and includes any employee or other person acting under the authority of any person in lawful occupation of that place or land.

## Imminent danger notice (section 68)

An Imminent danger notice is verbal notification under [section 68](#) of the Act to an occupier or owner of land that Fire and Emergency is going to enter the land and remove or destroy any vegetation or other thing on land that we consider is a source of imminent danger from fire to life, property, or any road.

Anyone receiving the verbal notice should be able to understand:

- that Fire and Emergency has decided that [description of fire hazard] is a source of imminent danger to [life, property, and/or road]
- why the fire hazard is a source of imminent danger
- that Fire and Emergency has arranged for the [removal or destruction] of the fire hazard under [section 68](#) of the Act by [name of contractor] on [date]
- any arrangements for the storage of items removed from the land, and the terms under which the owner/occupier can retrieve those items.

In the event of an actual fire, we can use all of our powers to deal with the emergency, including [sections 42 and 43](#) to remove vegetation or material without telling you.

## Regulatory compliance

### Fire and Emergency's role

The Act gives Fire and Emergency compliance and enforcement responsibilities, and powers to support interventions in cases of non-compliance. In line with this, we have developed a comprehensive [Risk Reduction Strategy](#), supported by a [Compliance and enforcement policy](#).

Compliance activities generally focus on education and awareness, followed by issuing warnings. If compliance is still an issue, then more formal enforcement powers may be used.

If there are cases of serious or repeated non-compliance, Fire and Emergency may use infringement notices or prosecute. For more information on Fire and Emergency's regulatory compliance policies and procedures and other relevant topics, visit [www.fireandemergency.nz/about-us/compliance-and-enforcement](http://www.fireandemergency.nz/about-us/compliance-and-enforcement).

## Contact Fire and Emergency

**In case of an emergency please call 111**

### General enquiries and questions

- Recruitment/volunteering
- Fire safety information
- Fire permits and seasons
- Evacuation schemes
- Request for access to the site of an emergency

[Submit a general enquiry or question](#) or call **04 496 3600**

### Lodge a complaint

<https://www.fireandemergency.nz/contact-us/complaints/>

### Fire hazards

- Complete [this online form](#)
- You can also call the Fire Information Unit on **0800 336 942**.

### Local contacts for this plan

Local contacts specific to this fire plan are included with the area information in this document.

## Glossary

**4R's** - Reducing risk, ensuring response readiness, providing emergency response and making coordinated efforts to enable recovery following an emergency.

**Build-up Index (BUI)** - A component of the Fire Weather System. This index shows the amount of fuel available for combustion indicating how the fire will develop after the initial spread. It is calculated using the Duff Moisture and Drought Code.

**Duff Moisture Code (DMC)** - A numerical rating of the average moisture content of loosely compacted organic layers of moderate depth. This code gives an indication of fuel consumption in moderate duff layers and medium-size woody material.

**Firebreak** - A natural or an artificial physical barrier against the spread of fire from or into any area of continuous flammable material – e.g., a track bulldozed clear of all vegetation.

**Fire control** - Preventing, detecting, controlling, and putting out fire, and protecting persons and property from fire.

**Fire control powers** - Our ability to legally require people to stop doing things that increase the risk of a fire, e.g. restricting where and when they can use fire, requiring vegetation to be removed to prevent the spread of fire, etc.

**Fire danger** – A rating of difficult a fire will be to control once it starts - e.g. low to extreme, low being easy to contain, extreme very difficult to contain.

**Fire Danger Rating System** - A relative class denoting the potential rates of spread, or suppression difficulty for specific combinations of temperature, relative humidity, drought effects and wind speed, indicating the relative evaluation of fire danger.

**Fire environment** - The surrounding conditions, influences, and modifying forces of topography, fuel, and weather that determine fire behaviour.

**Fire hazard** - Vegetation or other thing on the land that Fire and Emergency reasonably considers likely to endanger persons or property by increasing the risk of the outbreak or spread of fire.

**Fire in open air** - Fire that isn't in a fireplace in a building or structure, or isn't in something else that Fire and Emergency says is not in the open air.

**Fire risk conditions** - Weather or other conditions that will, or are likely to, endanger persons or property by increasing the risk of the outbreak or spreading of fire.

**Fire seasons** – Period when we restrict or prohibit the use of fire in the open air. Areas that are not in a Restricted or Prohibited fire season are in an Open fire season. Can also refer to the October to May period when fires are more likely.

**Fire weather** – Weather conditions which influence fire ignition, behaviour, and suppression.

**Fire Weather System** - numerical values that indicate weather and fuel conditions that influence fire behaviour, which feeds into the Fire Danger Rating System.

**Grass curing (GC)** – A component of the Fire Weather System. Grass goes through a natural process where after flowering/seeding it changes colour as it dies off. This process is known as 'curing.' The degree of curing (%) is the portion of dead grass vs live. Dead grass allows fire to spread easily.

**Important Bird Areas (IBAs)** - Sites recognised as internationally important for bird conservation and known to support key bird species and other biodiversity. Legal protection, management and monitoring of these crucial sites are all important targets for action. Many bird species may be effectively conserved by these means.

**Land cover** – What covers the land – trees, grasslands, scrub, residential property.

**Land use** – How the land is used – e.g. farming, forestry, residential, industrial.

**Local area** - The area within the boundaries of a local advisory committee that are set in accordance with section 16 of the Act.

**Primary production** - Livestock farming for dairy, meat and wool. Horticulture, including kiwifruit, apples, avocados, grapes for wine production, vegetables, arable and seed crops, other horticultural crops, cut flowers, and other animal products. Also includes forestry, but this is dealt with separately in fire plans.

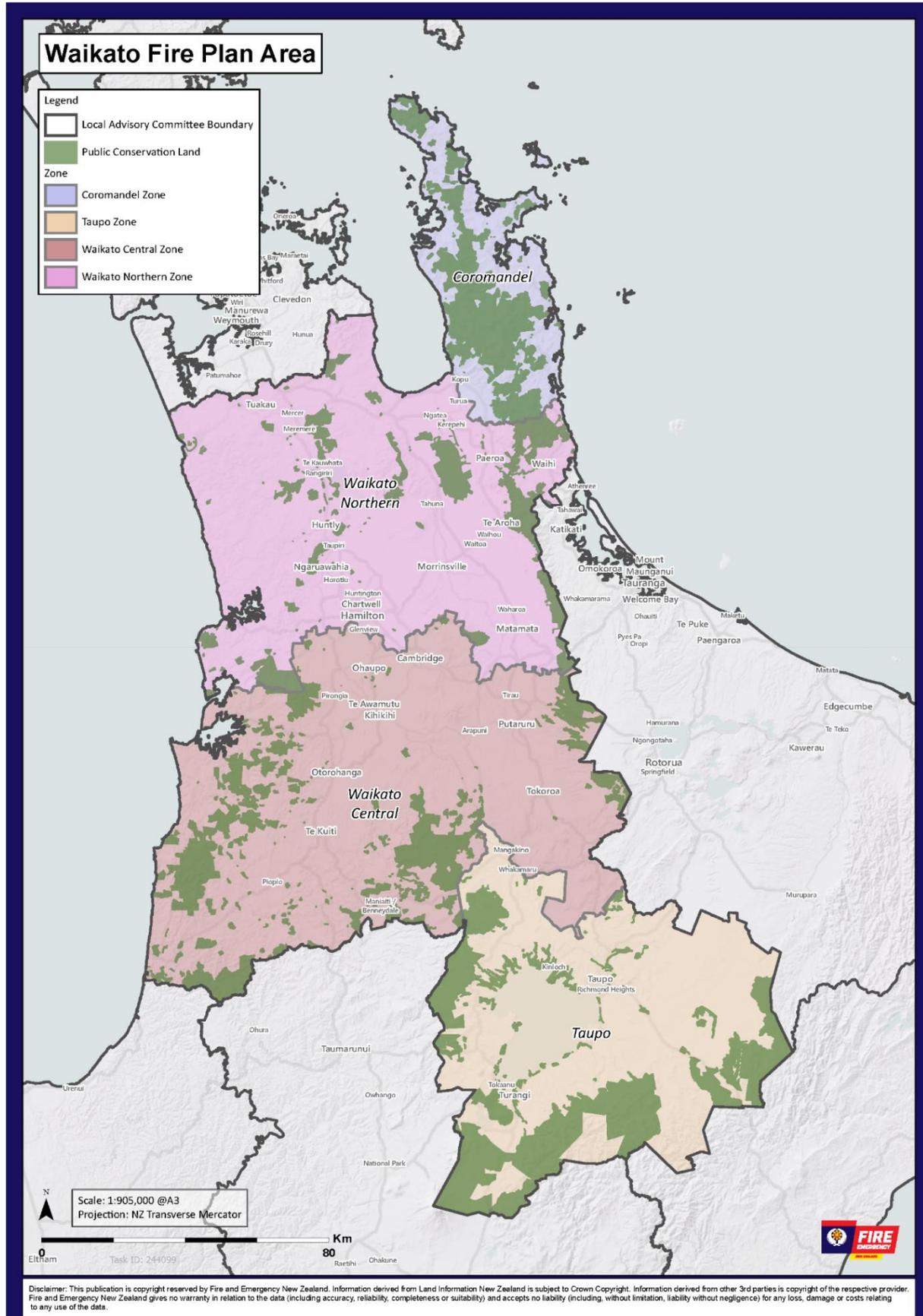
**Public conservation land (PCL)** – land used for conservation purposes, including National Parks and forest parks. Often managed by Department of Conservation or the regional council.

**Remote Automatic Weather Station (RAWS)** - Weather station that automatically provides the data used to determine weather and fuel conditions. Results are available from <https://fireweather.niwa.co.nz> and products such as Eco Connect.

**Scientific Reserves** - Per the Reserves Act 1977, the principal purpose of these reserves is the protection and preservation in perpetuity of areas for scientific study, research, education and the benefit of the country.

## Waikato information

This section contains the information specific to this fire plan area, including an overview of the area as a whole, and more detailed information for each of the zones within the area.



## Area overview

### Geography

The Waikato landscape is diverse with sandy coastal zones, flat pasture lands, large, protected areas (Tongariro National Park etc., forest parks), alpine zones, modified by New Zealand's largest river, and remnant wetland areas.

### Demographics

Demographics help us understand how our communities use fire, and the type of support they might need and how we communicate with them.

Around 10% of New Zealand's total population and 14.7% of the Māori population lives within the Plan Area.

Parts of the area such as the Coromandel Peninsula and Taupō have strong tourism links which sees the population increase significantly over the summer months.

The area is experiencing significant population growth with an ageing population.

The population of the area is 458,202.

Age group	% of population	Ethnicity	% of population
Under 15	21%	European	74%
15 –29	20%	Māori	24%
30-64	43%	Pacific Islands	5%
65+	16%	Asian	10%
		Other	2%

### Zones

Because of the different fire risk conditions that exist in different parts of the fire plan area, the area is divided into several different fire season zones to allow for appropriate fire control measures to be applied locally:

- Coromandel Zone
- Waikato Northern Zone
- Waikato Central Zone
- Taupō Zone
- Public conservation land

This plan area also includes zones which are part of neighbouring area fire plans:

- Te Ūpoko Shared Ruapehu Rural Zone (Manawatū-Whanganui)
- Auckland Waikato Rural Shared Zone (Tamaki-Makaurau)

Each zone is described and its relevant trigger thresholds and other factors for changing fire seasons are listed in the zone information.

### New Zealand Defence Force

Fire and Emergency has entered into an operational service agreement with the New Zealand Defence Force. The New Zealand Defence Force exercises fire control powers in relation to certain Defence Areas listed in a schedule to the agreement, where they have their own fire plans.

None of the scheduled Defence Areas are in the Waikato local area. Any New Zealand Defence Force activities, including training activities, in other Defence Areas are subject to Fire and Emergency's fire permit requirements, though not our other fire control powers.

**Frequency of elevated fire danger**

On average, this area experiences:

- 10.8 days of very high to extreme fire danger (based on Scion fire danger climate data for seasonal severity).

**Fire history**

The known fire history for this area will be shown in the zone information.

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**Local contacts**

Fire and Emergency - Waikato District

Region2FirePlans@fireandemergency.nz

Ph. 07 839 4996

## Schedule of stakeholders

This schedule of stakeholders includes those who should be involved in the creation of these fire plan and their amendments, or consulted before making use of the powers of section 52 of the Fire and Emergency New Zealand Act 2017, or notified when this happens. Zone-level stakeholders are listed with each zone description.

When we say...	What we mean is...
Consult while amending plan	You will have the opportunity for input into the fire plan before it is released for public consultation. Can include workshops and other opportunities to contribute.
Public consultation	You will have the opportunity to comment during the 6-week public consultation period.
Consult during decision making	The plan to change to a prohibited fire season or use section 52 will be discussed with you before it is implemented.
Notify of decision	You will be contacted directly when there is a change to a prohibited fire season, or when section 52 is implemented.
Notify using public channels	You will find out about the change in fire season etc. the same way as other members of the public.

## National-level stakeholders

Stakeholders who have an interest in this fire plan area, but are managed at national level.

Stakeholder	Fire plan development	Fire plan amendment	Changing fire season to prohibited	Section 52 fire prohibitions	Section 52 restrictions/prohibitions on activities
Department of Conservation	Consulted while creating plan	Consult while amending plan	Consult during decision making	Consult during decision making	Consult during decision making
NZ Defence Force	Consulted while creating plan	Consult while amending plan	Consult during decision making	Consult during decision making	Consult during decision making
Environmental Protection Authority	Consulted while creating plan	Consult while amending plan	Notify using public channels	Notify using public channels	Notify using public channels
Federated Farmers NZ	Public consultation	Consult while amending plan	Consult during decision making	Consult during decision making	Consult during decision making

Stakeholder	Fire plan development	Fire plan amendment	Changing fire season to prohibited	Section 52 fire prohibitions	Section 52 restrictions/prohibitions on activities
Land Information NZ	Consulted while creating plan	Consult while amending plan	Notify using public channels	Notify using public channels	Notify using public channels
Taituarā - Local Govt Professionals Aotearoa (SOLGM)	Consulted while creating plan	Consult while amending plan	Notify using public channels	Notify using public channels	Notify using public channels
Local Government NZ	Consulted while creating plan	Consult while amending plan	Notify using public channels	Notify using public channels	Notify using public channels
Forest Owners Association	Consulted while creating plan	Consult while amending plan	Consult during decision making	Consult during decision making	Consult during decision making
Ministry for Primary Industries - Te Uru Rākau and Crown Forestry	Consulted while creating plan	Consult while amending plan	Notify of decision	Notify of decision	Consult during decision making
NZ Farm forestry Association	Public consultation	Consult while amending plan	Consult during decision making	Consult during decision making	Consult during decision making
Te Puni Kōkiri	Public consultation	Consult while amending plan	Notify using public channels	Notify using public channels	Notify using public channels
Ngā Whenua Rāhui	Public consultation	Consult while amending plan	Notify using public channels	Notify using public channels	Notify using public channels
Waka Kotahi NZ Transport Agency	Public consultation	Consult while amending plan	Notify using public channels	Notify using public channels	Consult during decision making
New Zealand Police	Public consultation	Public consultation	Notify of decision	Notify using public channels	Notify using public channels

If your organisation should be involved in fire plans at a national level, please contact us.

## Area-level stakeholders

This list is for stakeholders who have an interest across the fire plan area. Stakeholders that have a particular interest in a zone are included in the relevant zone information.

Stakeholder	Fire plan development	Fire plan amendment	Changing fire season to prohibited	Section 52 fire prohibitions	Section 52 restrictions/prohibitions on activities
Emergency Management Bay of Plenty	Consulted while creating plan	Consult while amending plan	Notify via public channels	Notify via public channels	Notify via public channels
Waikato Federated Farmers	Consulted while creating plan	Consult while amending plan	Notify via public channels	Notify via public channels	Notify via public channels
Hauraki/Coromandel Federated Farmers	Consulted while creating plan	Consult while amending plan	Notify via public channels	Notify via public channels	Notify via public channels
Iwi: <ul style="list-style-type: none"> <li>• Ngāti Hako</li> <li>• Ngāti Whanaunga</li> <li>• Ngāti Maru</li> <li>• Ngāti Maru/Hauraki Collective</li> <li>• Ngāti Tamaterā</li> <li>• Ngāti Porou</li> <li>• Ngāti Hei</li> <li>• Ngāti Tara Tokanui</li> <li>• Ngāti Puu</li> <li>• Waikato Tainui</li> </ul>	Consulted while creating plan	Consult while amending plan	Notify via public channels	Notify via public channels	Notify via public channels
Forestry companies	Consulted while creating plan	Consult while amending plan	Notify via public channels	Notify via public channels	Notify via public channels
Department of Conservation: <ul style="list-style-type: none"> <li>• Hauraki Waikato Taranaki conservancy</li> <li>• Central North Island conservancy</li> </ul>	Consulted while creating plan	Consult while amending plan	Notify via public channels	Notify via public channels	Notify via public channels

Stakeholder	Fire plan development	Fire plan amendment	Changing fire season to prohibited	Section 52 fire prohibitions	Section 52 restrictions/prohibitions on activities
Public	Public consultation	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels

If your organisation should be involved in fire plans, and have an interest across the whole fire plan area, please contact us about being added to this list.

## Zone information

### Coromandel Zone

#### Geography

The Coromandel Peninsula on the North Island of New Zealand extends 85 kilometres north from the western end of the Bay of Plenty, forming a natural barrier protecting the Hauraki Gulf and the Firth of Thames in the west from the Pacific Ocean to the east. It is 40 kilometres wide at its broadest point.

The peninsula is steep and hilly and largely covered in bush. The Coromandel Range forms the spine for most of the peninsula, with the Moehau Range at the northern end providing the highest point at nearly 900 metres.

#### Demographics

Owing to the nature of the land, much of the Coromandel's population clusters in a small number of towns and communities along the south-eastern and south western coasts. Only five towns have populations of over 1000 (Coromandel, Whitianga, Thames, Tairua, and Whangamatā), and of these only Thames, with 7,380 people, and Whitianga, with 6,160 people, have populations of over 5000.

Several small towns dot the coast of the Firth of Thames in the southwest. Other small towns on the peninsula include Te Puru, Matarangi, Whangapoua, Tapu, Whiritoa, Hikuai, Port Jackson, Port Charles, Tairua, Pauanui and Colville. The population of several of these centres is highly seasonal, with many holiday homes in the Coromandel.

During the summer holiday period around Christmas and New Year, visiting families and travellers from around the North Island add significantly to activity in the area, particularly in Whangamatā, Whitianga, Matarangi, Tairua and Pauanui.

Population density decreases with both distance from the coast and distance north. Of the main population centres, only Coromandel, Colville, Matarangi and Whitianga lie in the north of the peninsula, and much of the interior remains virtually uninhabited.

Please refer to the demographics section in the area overview for information on age and ethnicity profiles.

#### Climate/weather

The Coromandel rises to 900m above sea level. The climate in Coromandel is warm and temperate. The rainfall in Coromandel is significant, with precipitation even during the driest month. In Coromandel, the average annual temperature is 15.2 °C. The annual rainfall is 1255 mm.

The Coromandel does not have very distinct seasons. As the region has a lengthy coastline, it enjoys a subtropical/oceanic climate with year-round moderate temperatures and no particular rainy season. Climate change predictions show prolonged dry spells with increased risk of high rainfall events occurring from ex tropical cyclones.

**Land cover/land use**

Land cover	Hectares
<b>Artificial surfaces</b>	
Built-up area (settlement)	2,988
Surface mine or dump	90
Transport infrastructure	86
Urban parkland/open space	562
	<b>3,726</b>
<b>Bare or lightly vegetated surfaces</b>	
Sand or gravel	530
Landslide	3
Alpine grass/herbfield	0
Gravel or rock	30
Permanent snow or ice	0
	<b>562</b>
<b>Water bodies</b>	
Lake or pond	53
River	331
Estuarine open water	3,686
	<b>4,071</b>
<b>Croplands</b>	
Short-rotation cropland	16
Orchard, vineyard or other perennial crop	505
	<b>521</b>
<b>Grassland, sledge and saltmarsh</b>	
High producing exotic grassland	41,933
Low producing grassland	1,154
Tall tussock grassland	0
Depleted grassland	0
Herbaceous freshwater vegetation	329
Herbaceous saline vegetation	911
Flaxland	10
	<b>44,337</b>

Land cover	Hectares
<b>Scrub and Scrubland</b>	
Fernland	8
Gorse and/or broom	525
Mānuka and/or kānuka	38,061
Broadleaved indigenous hardwoods	12,203
Sub-alpine scrubland	0
Mixed exotic scrubland	108
Matagouri or grey scrub	0
	<b>50,905</b>
<b>Forest</b>	
Deciduous hardwoods	95
Exotic forest	29,354
Forest - harvested	1,501
Indigenous forest	88,918
Mangrove	1,310
	<b>121,178</b>
<b>Other</b>	
Not land	0

**Industry**

Industry	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures
Primary production, including horticulture and agriculture <ul style="list-style-type: none"> <li>• use of machinery – sparks</li> <li>• relevant operations affected</li> </ul>	☒	☒	☒
Forestry <ul style="list-style-type: none"> <li>• use of machinery – sparks</li> <li>• relevant operations affected</li> <li>• fire crew on standby and firebreaks in place between forestry and</li> </ul>	☒	☒	☒

**Lifeline utilities/other infrastructure**

Lifeline utility/ other infrastructure	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures
Electricity – transmission lines <ul style="list-style-type: none"> <li>• Sparking during high winds</li> <li>• Use of auto-reclosers limited in high fire danger</li> <li>• Recommended vegetation mitigation practices</li> </ul>	☒	☒	☒
Roothing network <ul style="list-style-type: none"> <li>• Sparks from vehicle malfunction, discarded cigarettes</li> <li>• Spark causing activities during road maintenance and mowing</li> </ul>	☒	☒	☐

There is no natural gas distribution network in the Coromandel.

**Recreational locations**

The Coromandel is well used by trampers and campers. Public conservation land makes a substantial part of the Coromandel and public use may be disrupted by fires.

Some forestry blocks with public access may be affected by section 52 closures: Whangamatā Mountain Bike track as an example.

**Cultural and recreational activities and events**

Tangata whenua have very strong ties to their whenua (land) and value being able to use their whenua without unnecessary restrictions.

We will consult with tangata whenua and consider the needs of iwi when making decisions about implementing restrictions or prohibitions with our fire control powers. The relevant iwi for this zone are listed as stakeholders.

Large scale events that might be cancelled because a restriction on activities can have a significant economic impact.

Placing restrictions or prohibitions on fire hazardous activities should not impose any unreasonable restrictions on people living and enjoying recreational activities in this zone.

Many outdoor events such as mountain bike races, back country running events, hunting opportunities may be affected by Fire and Emergency exercising its fire control powers.

Cultural and recreational activities and events	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures
Cultural fires, e.g. Hāngī	☒	☒	☐
Fireworks <ul style="list-style-type: none"> <li>• Use may be prohibited during high fire danger</li> </ul>	☒	☒	☐

Cultural and recreational activities and events	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures
Hunting <ul style="list-style-type: none"> <li>• Campfires</li> <li>• Access may be restricted during high fire danger</li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mountain biking, back country running <ul style="list-style-type: none"> <li>• Access may be restricted during high fire danger</li> </ul>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

**Special risk areas**

Special risk areas	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures
Coromandel Forest Park <ul style="list-style-type: none"> <li>• Ecological values at risk</li> </ul>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Due to the values at risk, public conservation lands are kept in a restricted fire season when they are not in a prohibited fire season. Even when the surrounding zone goes to an open fire season, public conservation land will remain in a restricted fire season.

**Known fire hazards**

There are no long-term fire hazards listed for this zone in the Fire Hazard Removal Case Management System.

**Frequency of elevated fire danger**

On average, this zone experiences:

- 6.2 days of very high to extreme fire danger (based on Scion fire danger climate data for seasonal severity)

**Fire history**

The known fire history for this zone for significant wildfires or fires caused by activities regulated by our fire control powers includes:

Year	Fire	Cause
2021	Port Jackson	Unknown
2020	Pumpkin Hill	Unknown
2018	Fletchers Bay	Fire works
2016	Comers Road	Escaped bonfire

**Predominant fuel type**

The predominant fuel type in this zone is native and exotic forestry with concentrated urban areas and farmland.

## Thresholds

### Fire seasons

For setting fire seasons, Build-up Index (BUI) is the most relevant fire weather index to monitor for where forest is the predominant fuel type.

Build Up Index (BUI)		
0-40	40-60	>60
Open	Restricted	Prohibited

### Prohibition on fires in open air (section 52)

We can use the same Fire Weather System trigger thresholds for prohibiting fires in the open air under section 52 as we do for changing to a prohibited fire season, but use section 52 when the fire risk conditions are not expected to last long enough to make changing to a prohibited fire season practical.

Other local thresholds have not been set.

### Prohibitions or restrictions on activities (section 52)

Localised trigger thresholds for applying section 52 to activities have not yet been developed, however there are some local mitigations used to reduce the need to implement it.

#### Forestry operations

Forest managers and Fire and Emergency will agree on thresholds for implementing mitigation options, such as:

- Starting the production day earlier (Summer Daylight Savings), with chainsaw operations beginning at first light. Working to early afternoon then patrolling for 1 hour after the last tree has been felled.
- Moving to forest blocks with a less extreme fire risk, and/or changing forest operation to non-chainsaw type work (regen pulling etc.)

#### Controlled burning

We have had a number of controlled burns on farms escape into neighbouring properties, so will work on educating our farming communities about safe burning in the outdoors, and ensuring permit conditions are met.

#### Roadside mowing

We will advise local authorities of the prohibited season and suggest they cease mowing or similar until prohibition ends. If any emergency works are needed, we'll suggest carrying out works using hand tools, or doing the work at dawn or dusk.

#### Mowing, ploughing or harrowing fields

We will consult with local landowners on what mitigations they will apply during times of increased fire risk. We will advise of fire season changes via normal channels (Federated Farmers etc.) and suggest that operation cease until conditions are suitable.

#### Hot works

We will advise of fire season changes via normal channels and suggest operation cease until conditions are suitable. If any emergency works needed, contractors would use their own procedures and policies.

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We are working on:

- Educating companies that do hot works
- Using the Forest Fire Risk Management Guidelines as an educational tool
- Establishing relationships with these local companies
- Establishing working relationships with Federated Farmers, and local forestry companies.

### **Cultural cooking fires**

Cultural cooking fires have been known to escape during extreme fire risk conditions. Cultural cooking fires are allowed during prohibited fire seasons without a permit in most cases, so we will work with our communities to educate them about safe use of cultural fires.

### **Powerline auto-reclosers**

We will advise lines companies of fire season changes via normal channels and suggest operation cease until conditions are suitable.

### **Rail transport operations**

Advise of fire season changes via normal channels and suggest operation cease until conditions are suitable. If any emergency works needed, they would use their own procedures and policies.

### **Representative remote automated weather stations**

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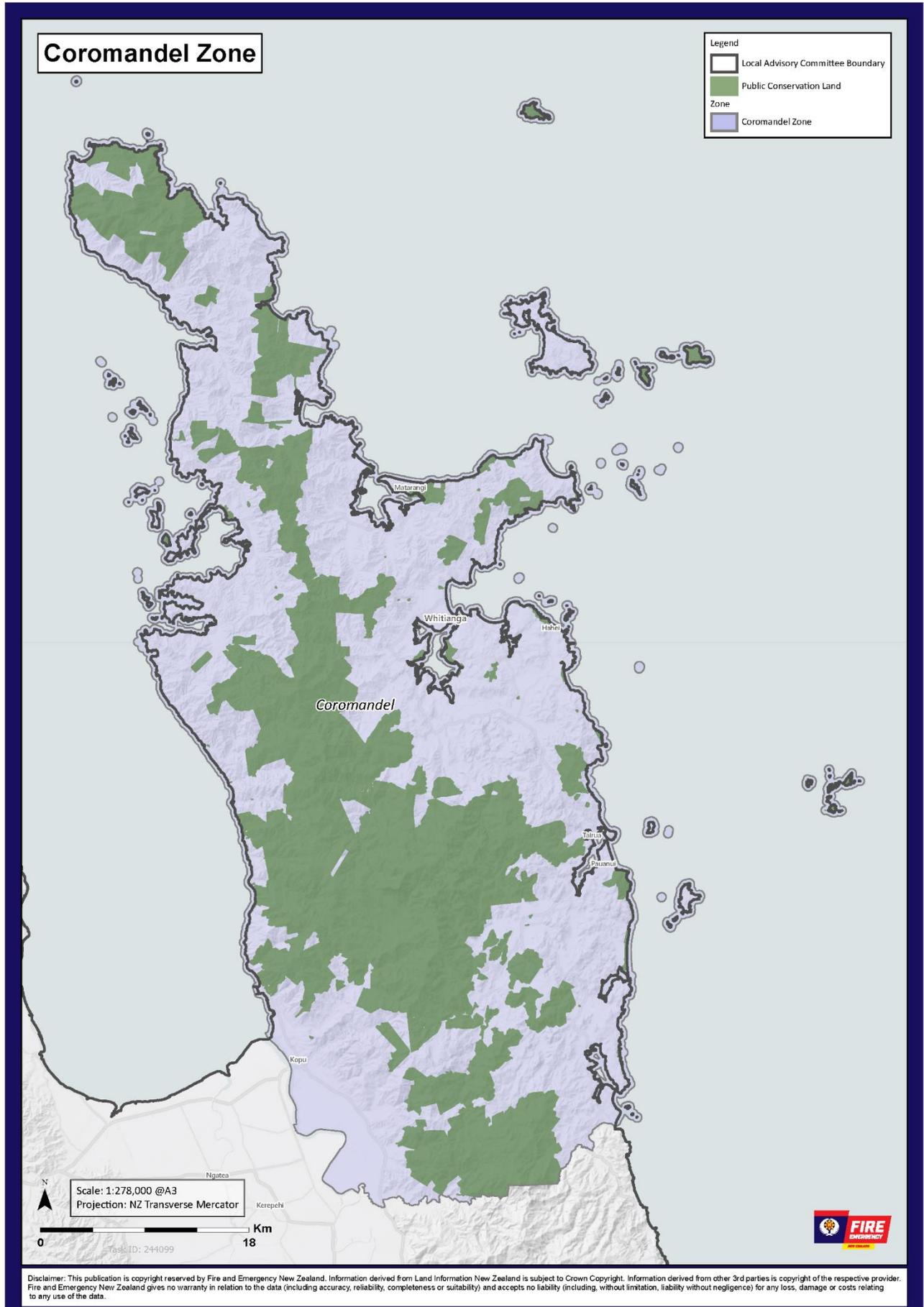
The Remote Automated Weather Stations (RAWS) used to decide whether we have reached the trigger thresholds are:

Manaia	Whangamatā
Waikawau Bay	Waihi

We will consider the forecast for these locations when declaring or revoking a fire season. We will look at the RAWS as a group to inform fire season changes.

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Coromandel Zone map



**Coromandel Zone stakeholders**

Stakeholder	Fire plan development	Fire plan amendment	Changing fire season to prohibited	Section 52 fire prohibitions	Section 52 restrictions/prohibitions on activities
Thames-Coromandel District Council	Consulted while creating plan	Consult while amending plan	Notify of decision	Notify of decision	Notify of decision
Iwi	Consulted while creating plan	Consult while amending plan	Notify via public channels	Notify via public channels	Notify via public channels
Department of Conservation	Consulted while creating plan	Consult while amending plan	Notify of decision	Notify of decision	Notify of decision
Forestry companies	Consulted while creating plan	Consult while amending plan	Notify of decision	Notify of decision	Notify of decision
Federated Farmers	Consulted while creating plan	Consult while amending plan	Notify of decision	Notify of decision	Notify of decision
Public	Public consultation	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels

If your organisation should be involved in fire plans, and have an interest in this zone, please contact us about being added to this list.

## Waikato Northern Zone

### Geography

This region has a wet temperate climate, and the land is largely pastoral farmland created by European settlers draining the extensive natural swamps, although it also holds undrained peat domes such as the Kopuatai (200km<sup>2</sup>) peat dome south of Ngātea.

It is in the broad undulating Waikato Plains that most of the region's population lives, and the land is intensively farmed with both livestock, mainly dairy cattle but with sheep farming on the hilly west margins, and crops such as maize.

To the east, the land rises towards the native bush slopes of the Kaimai and Mamaku Ranges.

### Demographics

With a population of 290,955, the zone is experiencing high levels of urban growth. The zone contains numerous towns and the city of Hamilton, this being the largest with a population of 160,911.

Please refer to the demographics section in the area overview for information on age and ethnicity profiles.

### Climate/weather

The climate is mild and temperate with moderate rainfall of 1200–1600mm per annum, with the higher western hills having the most rain. Summers are drier with typical maximum temperatures of 22–28 degrees Celsius and overnight lows of 12-16 degrees. Summer droughts occur one year in ten. Typical winter maxima are 10–16 degrees Celsius, with lows generally ranging from 0-8 degrees.

Depressions cause regular morning fog, under anti-cyclonic conditions, which burns off by late morning to produce many still, clear sunny days. Morning frosts are also common during winter anticyclones.

Another distinctive feature is the low average wind speed in the interior basin due to the sheltering influence of the hills and mountains to the west and south-west. The prevailing winter wind is from the south-west.

The Waikato has very high sunshine hours, averaging 2200 hours. This results in rapid growth of grass, horticulture and crops.

### Land cover/ land use

Land cover	Hectares
Artificial surfaces	
Built-up area (settlement)	12,496
Surface mine or dump	2,107
Transport infrastructure	157
Urban parkland/open space	2,102
	<b>16,862</b>

Land cover	Hectares
<b>Bare or lightly vegetated surfaces</b>	
Sand or gravel	1,134
Landslide	8
Alpine grass/herbfield	0
Gravel or rock	10
Permanent snow or ice	0
	<b>1,152</b>
<b>Water bodies</b>	
Lake or pond	6,784
River	4,390
Estuarine open water	1,307
	<b>12,481</b>
<b>Croplands</b>	
Short-rotation cropland	11,927
Orchard, vineyard or other perennial crop	1,066
	<b>12,993</b>
<b>Grassland, sedge and saltmarsh</b>	
High producing exotic grassland	531,249
Low producing grassland	2,802
Tall tussock grassland	0
Depleted grassland	0
Herbaceous freshwater vegetation	14,863
Herbaceous saline vegetation	633
Flaxland	76
	<b>549,623</b>
<b>Scrub and Scrubland</b>	
Fernland	4
Gorse and/or broom	4,431
Mānuka and/or kānuka	22,287
Broadleaved indigenous hardwoods	8,825
Sub-alpine scrubland	0
Mixed exotic scrubland	112
Matagouri or grey scrub	16
	<b>35,675</b>

Land cover	Hectares
<b>Forest</b>	
Deciduous hardwoods	11,341
Exotic forest	28,706
Forest - harvested	3,131
Indigenous forest	88,652
Mangrove	1,358
	<b>133,186</b>
<b>Other</b>	
Not land	1

**Industry**

Industry	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures
Primary production, including horticulture and agriculture <ul style="list-style-type: none"> <li>• use of machinery – sparks               <ul style="list-style-type: none"> <li>• relevant operations affected</li> </ul> </li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Forestry <ul style="list-style-type: none"> <li>• use of machinery – sparks</li> <li>• relevant operations affected               <ul style="list-style-type: none"> <li>• fire crew on standby and firebreaks in place between forestry and</li> </ul> </li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

**Lifeline utilities/other infrastructure**

Lifeline utility/ other infrastructure	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures
Electricity – transmission lines <ul style="list-style-type: none"> <li>• Sparking during high winds</li> <li>• Use of auto-reclosers limited in high fire danger</li> <li>• Recommended vegetation mitigation practices</li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Main gas pipeline from Taranaki and natural gas distribution network	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Lifeline utility/ other infrastructure	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures
Railway corridors <ul style="list-style-type: none"> <li>sparks from trains and maintenance equipment</li> <li>relevant operations affected</li> <li>recommended best practice – water carts wetting rail corridors</li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Recreational locations

The Waikato is used by trampers, cyclists and campers.

Public conservation land makes a small but significant part of the Waikato and public use may be disrupted by fires, or access restrictions is times of high fire danger.

### Cultural and recreational activities and events

Tangata whenua have very strong ties to their whenua (land) and value being able to use their whenua without unnecessary restrictions.

We will consult with tangata whenua and consider the needs of iwi when making decisions about implementing restrictions or prohibitions with our fire control powers. The relevant iwi for this zone are listed as stakeholders.

Large scale events that might be cancelled because a restriction on activities can have a significant economic impact.

Placing restrictions or prohibitions on fire hazardous activities should not impose any unreasonable restrictions on people living and enjoying recreational activities in this zone.

Many outdoor events such as multisport events, mountain bike races, back country running events, hunting opportunities may be affected by Fire and Emergency exercising its fire control powers.

Cultural and recreational activities and events	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures
Hāngī	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Fireworks <ul style="list-style-type: none"> <li>Use may be prohibited during high fire danger</li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Hunting <ul style="list-style-type: none"> <li>Campfires</li> <li>Access may be restricted during high fire danger</li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mountain biking, back country running <ul style="list-style-type: none"> <li>Access may be restricted during high fire danger</li> </ul>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

**Special risk areas**

Special risk area	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures
Peat zones: <ul style="list-style-type: none"> <li>Kopuatai (internationally important site)</li> <li>Whangamarino</li> </ul>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Due to the values at risk, public conservation lands are kept in a restricted fire season when they are not in a prohibited fire season. Even when the surrounding zone goes to an open fire season, public conservation land will remain in a restricted fire season.

**Known fire hazards**

There are no long-term fire hazards listed in this zone in the Fire Hazard Removal Case Management System

**Frequency of elevated fire danger**

On average, this zone experiences:

- 15 days of very high to extreme fire danger (based on Scion fire danger climate data for seasonal severity)

**Fire history**

The known fire history for this zone for significant wildfires or fires caused by activities regulated by our fire control powers includes:

Year	Fire	Cause
2016	Hakarimata	Escaped controlled burn

**Predominant fuel type**

The predominant fuel type in this zone is grassland with mixed areas of native and exotic forests.

**Thresholds****Fire seasons**

The degree of grass curing (GC%) is the most relevant fire weather data to monitor for where grassland is the predominant fuel type.

Grass Curing (GC%)		
0–50	50–80	>80
Open	Restricted	Prohibited

**Prohibition on fires in open air (section 52)**

We can use the same Fire Weather System trigger thresholds for prohibiting fires in the open air under section 52 as we do for changing to a prohibited fire season, but use section 52 when the fire risk conditions are not expected to last long enough to make changing to a prohibited fire season practical.

Other local thresholds have not been set.

**Prohibitions or restrictions on activities (section 52)**

Localised trigger thresholds for applying section 52 to activities have not yet been developed, however there are some local mitigations used to reduce the need to implement it.

**Forestry operations**

Forest managers and Fire and Emergency will agree on thresholds for implementing mitigation options, such as:

- Starting the production day earlier (Summer Daylight Savings), with chainsaw operations beginning at first light. Working to early afternoon then patrolling for 1 hour after the last tree has been felled.
- Moving to forest blocks with a less extreme fire risk, and/or changing forest operation to non-chainsaw type work (regen pulling etc.)

**Controlled burning**

We have had a number of controlled burns on farms escape into neighbouring properties, so will work on educating our farming communities about safe burning in the outdoors, and ensuring permit conditions are met.

**Roadside mowing**

We will advise local authorities of the prohibited season and suggest they cease mowing or similar until prohibition ends. If any emergency works are needed, we'll suggest carrying out works using hand tools, or doing the work at dawn or dusk.

**Mowing, ploughing or harrowing fields**

We will consult with local landowners on what mitigations they will apply during times of increased fire risk. We will advise of fire season changes via normal channels (Federated Farmers etc.) and suggest that operation cease until conditions are suitable.

**Hot works**

We will advise of fire season changes via normal channels and suggest operation cease until conditions are suitable. If any emergency works needed, contractors would use their own procedures and policies.

We are working on:

- Educating companies that do hot works
- Using the Forest Fire Risk Management Guidelines as an educational tool
- Establishing relationships with these local companies
- Establishing working relationships with Federated Farmers, and local forestry companies.

**Cultural cooking fires**

Cultural cooking fires have been known to escape during extreme fire risk conditions. Cultural cooking fires are allowed during prohibited fire seasons without a permit in most cases, so we will work with our communities to educate them about safe use of cultural fires.

**Powerline auto-reclosers**

We will advise lines companies of fire season changes via normal channels and suggest operation cease until conditions are suitable.

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**Rail transport operations**

Advise of fire season changes via normal channels and suggest operation cease until conditions are suitable. If any emergency works needed, they would use their own procedures and policies.

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**Representative  
remote  
automated  
weather stations**

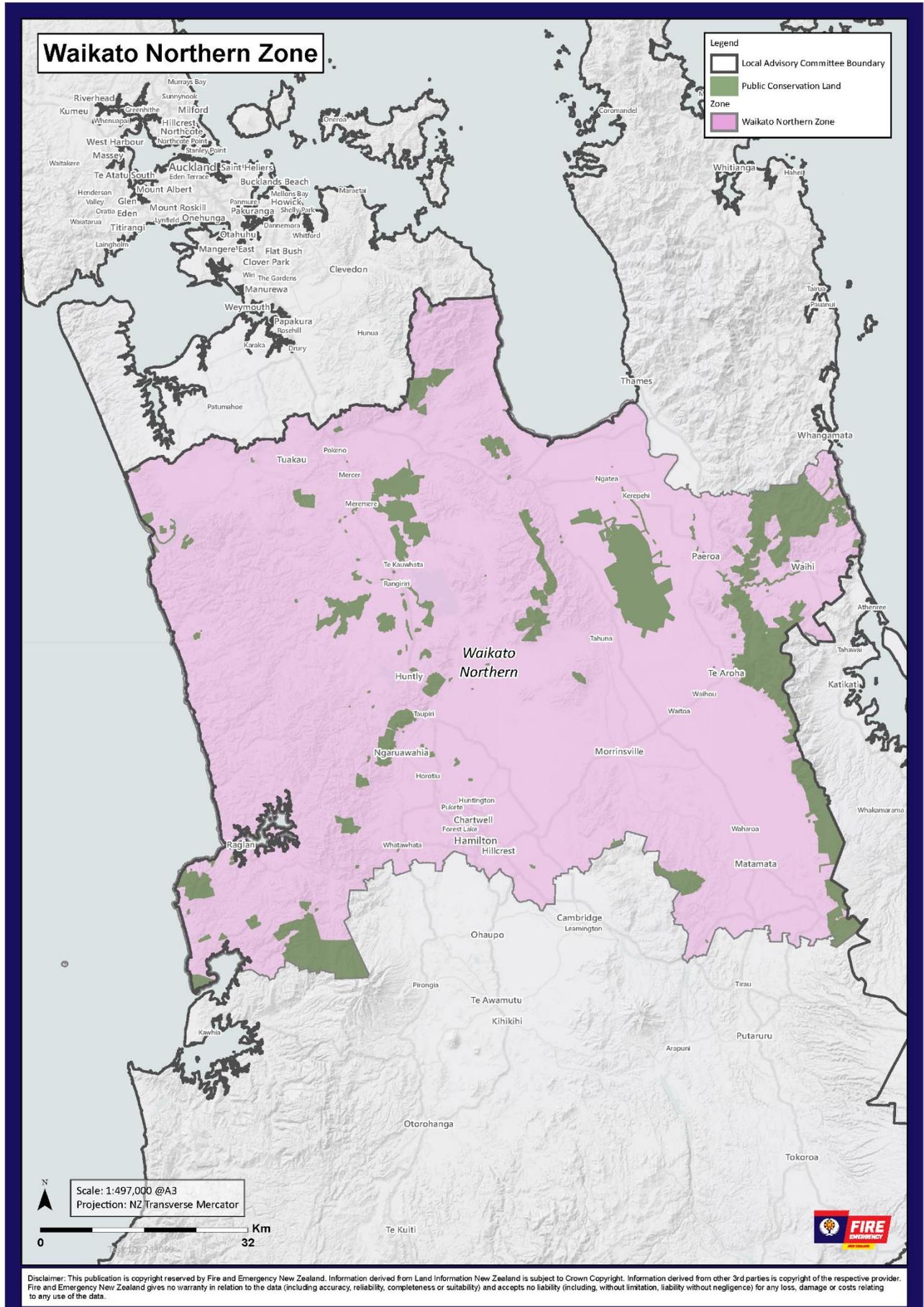
The Remote Automated Weather Stations (RAWS) used to determine whether we have reached the trigger thresholds are:

Hamilton	Paeroa	Waihi Beach
Waerenga	Te Ākau	

We will consider the forecast for these locations when declaring or revoking a fire season. We will look at the RAWS as a group to inform fire season changes.

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Waikato Northern Zone map



**Waikato Northern Zone stakeholders**

Stakeholder	Fire plan development	Fire plan amendment	Changing fire season to prohibited	Section 52 fire prohibitions	Section 52 restrictions/prohibitions on activities
Department of Conservation: <ul style="list-style-type: none"> <li>Hauraki Waikato Taranaki conservancy</li> </ul>	Consulted while creating plan	Consult while amending plan	Notify of decision	Notify of decision	Notify of decision
Local Territorial Authorities: <ul style="list-style-type: none"> <li>Waikato District Council</li> <li>Waipā District Council</li> <li>Matamata-Piako District Council</li> <li>Hauraki District Council</li> <li>Waikato Regional Council</li> </ul>	Consulted while creating plan	Consult while amending plan	Notify of decision	Notify of decision	Notify of decision
Forestry companies	Consulted while creating plan	Consult while amending plan	Notify of decision	Notify of decision	Notify of decision
Federated Farmers	Consulted while creating plan	Consult while amending plan	Notify of decision	Notify of decision	Notify of decision
Iwi: <ul style="list-style-type: none"> <li>Waikato Tainui</li> </ul>	Consulted while creating plan	Consult while amending plan	Notify of decision	Notify of decision	Notify of decision
Public	Public consultation	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels

If your organisation should be involved in fire plans, and have an interest in this zone, please contact us about being added to this list.

## Waikato Central Zone

### Geography

This region has a wet temperate climate, and the land is largely pastoral farmland created by European settlers draining the extensive natural swamps, is in the broad undulating Waikato Plains that most of the region's population resides, and the land is intensively farmed with both livestock, mainly dairy.

To the east, the land rises towards the forested slopes of the Kaimai and Mamaku Ranges.

Other major towns in the region are Tokoroa, Te Awamutu, Cambridge. The region also includes the smaller towns of Ōtorohanga, Putāruru, Te Kuiti, Tīrau and Piopio.

### Demographics

The zone contains several towns and rural settlements, with an overall population of 96,690.

Please refer to the demographics section in the area overview for information on age and ethnicity profiles.

### Climate/weather

The climate is mild and temperate with moderate rainfall of 1200–1600mm per annum, with the higher western hills having the most rain. Summers are drier with typical maximum temperatures of 22–28 degrees Celsius and overnight lows of 12–16 degrees. Typically, summer droughts occur one year in ten. Typical winter maxima are 10–16 degrees Celsius, with lows generally ranging from 0–8 degrees.

Depressions cause regular morning fog, under anti-cyclonic conditions, which burns off by late morning to produce many still, clear sunny days. Morning frosts are also common during winter anticyclones.

Another distinctive feature is the low average wind speed in the interior basin due to the sheltering influence of the hills and mountains to the west and south-west. The prevailing winter wind is from the south-west. The Waikato has very high sunshine hours and provides rapid growth of grass and crops.

### Land cover/land use

Land cover	Hectares
<b>Artificial surfaces</b>	
Built-up area (settlement)	5,038
Surface mine or dump	725
Transport infrastructure	304
Urban parkland/open space	918
	<b>6,985</b>
<b>Bare or lightly vegetated surfaces</b>	
Sand or gravel	1,065
Landslide	18
Alpine grass/herbfield	0
Gravel or rock	195
Permanent snow or ice	0
	<b>1,278</b>

Land cover	Hectares
<b>Water bodies</b>	
Lake or pond	3,466
River	1,095
Estuarine open water	227
	<b>4,788</b>
<b>Croplands</b>	
Short-rotation cropland	2,647
Orchard, vineyard or other perennial crop	802
	<b>3,449</b>
<b>Grassland, sledge and saltmarsh</b>	
High producing exotic grassland	530,017
Low producing grassland	9,915
Tall tussock grassland	0
Depleted grassland	0
Herbaceous freshwater vegetation	1,903
Herbaceous saline vegetation	302
Flaxland	6
	<b>542,142</b>
<b>Scrub and scrubland</b>	
Fernland	105
Gorse and/or broom	4,131
Mānuka and/or kānuka	18,431
Broadleaved indigenous hardwoods	15,845
Sub-alpine scrubland	2
Mixed exotic scrubland	329
Matagouri or grey scrub	16
	<b>38,858</b>
<b>Forest</b>	
Deciduous hardwoods	2,449
Exotic forest	109,066
Forest - harvested	10,449
Indigenous forest	187,373
Mangrove	6
	<b>309,344</b>
<b>Other</b>	
Not land	4

**Industry**

Industry	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures
Primary production, including horticulture and agriculture <ul style="list-style-type: none"> <li>• use of machinery – sparks</li> <li>• relevant operations affected</li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Forestry <ul style="list-style-type: none"> <li>• use of machinery – sparks</li> <li>• relevant operations affected</li> <li>• fire crew on standby and firebreaks in place between forestry and</li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

**Lifeline utilities/other infrastructure**

Lifeline utility/ other infrastructure	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures
Electricity transmission lines <ul style="list-style-type: none"> <li>• Sparking during high winds</li> <li>• Use of auto-reclosers limited in high fire danger</li> <li>• Recommended vegetation mitigation practices</li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Natural gas distribution network <ul style="list-style-type: none"> <li>• Gas leaks</li> <li>• Protected by own controls on use of fire and other activities in vicinity</li> </ul>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Railway corridors <ul style="list-style-type: none"> <li>• sparks from trains and maintenance equipment</li> <li>• relevant operations affected</li> <li>• recommended best practice – water carts wetting rail corridors</li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Roading network <ul style="list-style-type: none"> <li>• Sparks from vehicle malfunction, discarded cigarettes</li> <li>• Spark causing activities during road maintenance and mowing</li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Recreational locations**

The Waikato is used by trampers, cyclists and campers. Public conservation land makes a small but significant part of the Waikato and public use may be disrupted by fires.

### Cultural and recreational activities and events

Tangata whenua have very strong ties to their whenua (land) and culture, and value being able to use their whenua without unnecessary restrictions.

We will consult with tangata whenua and consider the needs of iwi when making decisions about implementing restrictions or prohibitions with our fire control powers. The relevant iwi for this zone are listed as stakeholders.

Large scale events that might be cancelled because a restriction on activities can have a significant economic impact.

Placing restrictions or prohibitions on fire hazardous activities should not impose any unreasonable restrictions on people living and enjoying recreational activities in this zone.

Cultural and recreational activities and events	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures
Cultural cooking, e.g. Hāngī	☒	☒	<input type="checkbox"/>
Fireworks <ul style="list-style-type: none"> <li>Use may be prohibited during high fire danger</li> </ul>	☒	☒	<input type="checkbox"/>

### Special risk areas

Due to the values at risk, public conservation lands are kept in a restricted fire season when they are not in a prohibited fire season. Even when the surrounding zone goes to an open fire season, public conservation land will remain in a restricted fire season.

### Known fire hazards

There are no long-term fire hazards listed for this zone in the Fire Hazard Removal Case Management System.

### Frequency of elevated fire danger

On average, this zone experiences:

- 13 days of very high to extreme fire danger (based on Scion fire danger climate data for seasonal severity).

### Fire history

The known fire history for this zone for significant wildfires or fires caused by activities regulated by our fire control powers includes:

Year	Fire	Cause
2017	SH1 off-ramp/Onion Rd	Unknown
2017	Hakarimata Range	Escaped controlled burn

### Predominant fuel type

The predominant fuel type in this zone is forest and grasslands.

## Thresholds

### Fire seasons

Grass Curing (GC%)	Build Up Index (BUI)		
	(%)	0-40	40-60
0-50	Open	Open/Restricted	Restricted/Prohibited
50-80	Open/Restricted	Restricted	Prohibited
>80	Restricted/Prohibited	Prohibited	Prohibited

Interpreting this matrix:

Open	Open fire season
Open/Restricted	Open fire season but we may move to a restricted season earlier if forecast conditions support this.
Restricted	Restricted fire season
Restricted/prohibited	Restricted Fire Season but we may move to a prohibited season earlier if forecast conditions support this or stay in a prohibited season longer if grasses remain dry and cured.
Prohibited	Prohibited fire season

### Prohibition on fires in open air (section 52)

We can use the same Fire Weather System trigger thresholds for prohibiting fires in the open air under section 52 as we do for changing to a prohibited fire season, but use section 52 when the fire risk conditions are not expected to last long enough to make changing to a prohibited fire season practical.

Other local thresholds have not been set.

### Prohibitions or restrictions on activities (section 52)

Localised trigger thresholds for applying section 52 to activities have not yet been developed, however there are some local mitigations used to reduce the need to implement it.

#### Forestry operations

Forest managers and Fire and Emergency will agree on thresholds for implementing mitigation options, such as:

- Starting the production day earlier (Summer Daylight Savings), with chainsaw operations beginning at first light. Working to early afternoon then patrolling for 1 hour after the last tree has been felled.
- Moving to forest blocks with a less extreme fire risk, and/or changing forest operation to non-chainsaw type work (regen pulling etc.)

#### Controlled burning

We have had a number of controlled burns on farms escape into neighbouring properties, so will work on educating our farming communities about safe burning in the outdoors, and ensuring permit conditions are met.

#### Roadside mowing

We will advise local authorities of the prohibited season and suggest they cease mowing or similar until prohibition ends. If any emergency works are needed, we'll suggest carrying out works using hand tools, or doing the work at dawn or dusk.

### **Mowing, ploughing or harrowing fields**

We will consult with local landowners on what mitigations they will apply during times of increased fire risk. We will advise of fire season changes via normal channels (Federated Farmers etc.) and suggest that operation cease until conditions are suitable.

### **Hot works**

We will advise of fire season changes via normal channels and suggest operation cease until conditions are suitable. If any emergency works needed, contractors would use their own procedures and policies.

We are working on:

- Educating companies that do hot works
- Using the Forest Fire Risk Management Guidelines as an educational tool
- Establishing relationships with these local companies
- Establishing working relationships with Federated Farmers, and local forestry companies.

### **Cultural cooking fires**

Cultural cooking fires have been known to escape during extreme fire risk conditions. Cultural cooking fires are allowed during prohibited fire seasons without a permit in most cases, so we will work with our communities to educate them about safe use of cultural fires.

### **Powerline auto-reclosers**

We will advise lines companies of fire season changes via normal channels and suggest operation cease until conditions are suitable.

### **Rail transport operations**

Advise of fire season changes via normal channels and suggest operation cease until conditions are suitable. If any emergency works needed, they would use their own procedures and policies.

### **Representative remote automated weather stations**

The Remote Automated Weather Stations (RAWS) used to determine whether we have reached the trigger thresholds are:

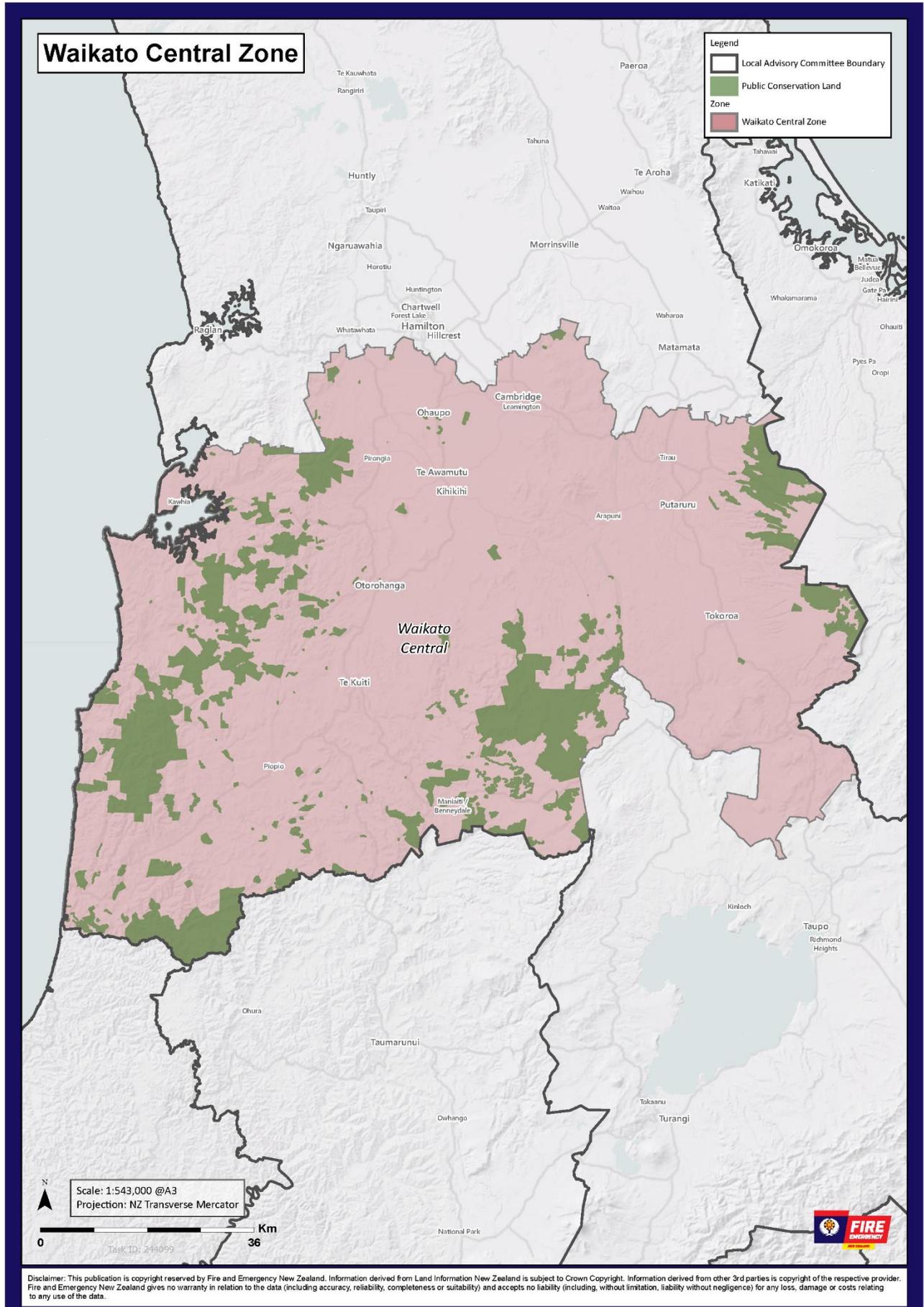
Piopio

Tahāroa

Hamilton

We will consider the forecast for these locations when declaring or revoking a fire season. We will look at the RAWS as a group to inform fire season changes.

Waikato Central Zone map



**Waikato Central Zone stakeholders**

Stakeholder	Fire plan development	Fire plan amendment	Changing fire season to prohibited	Section 52 fire prohibitions	Section 52 restrictions/prohibitions on activities
Local district councils: <ul style="list-style-type: none"> <li>• Waipā District Council</li> <li>• Hamilton City Council</li> <li>• Waikato District Council</li> <li>• Matamata-Piako District Council</li> </ul>	Consulted while creating plan	Consult while amending plan	Notify of decision	Notify of decision	Notify of decision
Department of Conservation: <ul style="list-style-type: none"> <li>• Central North Island conservancy</li> <li>• Hauraki, Waikato Taranaki conservancy (HWT)</li> </ul>	Consulted while creating plan	Consult while amending plan	Notify of decision	Notify of decision	Notify of decision
Forestry companies	Consulted while creating plan	Consult while amending plan	Notify of decision	Notify of decision	Notify of decision
Public	Public consultation	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels

If your organisation should be involved in fire plans, and have an interest in this zone, please contact us about being added to this list.

## Taupō Zone

### Geography

Covering 6,350 km<sup>2</sup> of land, as well as a further 610 km<sup>2</sup> of lake area, both in Lake Taupō, New Zealand's largest lake, and also in the smaller Lake Rotoaira.

The district stretches from the small town of Mangakino in the northwest to the Tongariro National Park in the south, and east into the Kaingaroa Forest.

The Tongariro National Park stretches around the massif of the three active volcanoes Ruapehu (2,797 m), Ngauruhoe (2,291 m), and Tongariro (1,978 m).

The Kaingaroa Forest covers 2900 km<sup>2</sup> and stretches from Lake Taupō in the south to Kawerau to the north, and is the largest forest plantation in New Zealand.

The district's population is largely located in the two main centres, Taupō and Tūrangi.

### Demographics

With a population of approximately 40,000 people, settlements within the zone are characterised by the two principal towns of Taupō and Tūrangi. There are several smaller settlements that are either lakeshore or rural and provide both permanent living and holiday accommodation. Proximity to the Tongariro National Park, as well as the predominant feature of Lake Taupō and the recreational activities this offers means the zone has tourism as a major contributor to the local economy.

Please refer to the demographics section in the area overview for information on age and ethnicity profiles.

### Climate/weather

The climate within the Taupō zone is cold and windy when compared to other parts of the North Island and has an oceanic climate.

This is due to the inland location, which results in the accumulation of dry air causing severe frost during winter in the lower lying areas and snow in the Tongariro alpine zones and surrounding ranges.

The summer climate is mild with maximum average temperature reaching 23 degrees and a minimum average temperature of 10 degrees.

### Land cover/land use

Land cover	Hectares
<b>Artificial surfaces</b>	
Built-up area (settlement)	3,263
Surface mine or dump	97
Transport infrastructure	593
Urban parkland/open space	881
	<b>4,833</b>
<b>Bare or lightly vegetated surfaces</b>	
Sand or gravel	4
Landslide	2
Alpine grass/herbfield	2,323
Gravel or rock	8,917
Permanent snow or ice	205
	<b>11,451</b>

Land cover	Hectares
<b>Water bodies</b>	
Lake or pond	64,120
River	948
Estuarine open water	3
	<b>65,072</b>
<b>Croplands</b>	
Short-rotation cropland	2,891
Orchard, vineyard or other perennial crop	69
	<b>2,961</b>
<b>Grassland, sledge and saltmarsh</b>	
High producing exotic grassland	152,067
Low producing grassland	8,365
Tall tussock grassland	9,609
Depleted grassland	1,137
Herbaceous freshwater vegetation	3,176
Herbaceous saline vegetation	0
Flaxland	258
	<b>174,612</b>
<b>Scrub and scrubland</b>	
Fernland	175
Gorse and/or broom	1,803
Mānuka and/or kānuka	39,572
Broadleaved indigenous hardwoods	36,977
Sub-alpine scrubland	11,532
Mixed exotic scrubland	898
Matagouri or grey scrub	27
	<b>90,984</b>
<b>Forest</b>	
Deciduous hardwoods	1,744
Exotic forest	162,728
Forest - harvested	14,795
Indigenous forest	142,321
Mangrove	0
	<b>321,588</b>
<b>Other</b>	
Not land	0

**Industry**

Industry	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures
Primary production, including horticulture and agriculture <ul style="list-style-type: none"> <li>• use of machinery – sparks</li> <li>• relevant operations affected</li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Forestry <ul style="list-style-type: none"> <li>• use of machinery – sparks</li> <li>• relevant operations affected <ul style="list-style-type: none"> <li>• fire crew on standby and firebreaks in place between forestry and</li> </ul> </li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Tourism <ul style="list-style-type: none"> <li>• Restricted entry in certain tourist locations and operations</li> </ul>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Major Hazard Facilities (MHF) <ul style="list-style-type: none"> <li>• use of machinery – sparks</li> <li>• relevant operations affected</li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

**Lifeline utilities/other infrastructure**

Lifeline utility/ other infrastructure	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures
Geothermal power stations <ul style="list-style-type: none"> <li>• Sparking during high winds</li> <li>• Use of auto-reclosers limited in high fire danger</li> <li>• Recommended vegetation mitigation practices</li> </ul>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Binary power stations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Hydro-electric power stations <ul style="list-style-type: none"> <li>• Sparking during high winds</li> <li>• Auto-reclosers disabled when triggers reached.</li> <li>• Recommended vegetation mitigation practices</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Electricity transmission lines <ul style="list-style-type: none"> <li>• Sparking during high winds</li> <li>• Use of auto-reclosers limited in high fire danger</li> <li>• Recommended vegetation mitigation practices</li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Lifeline utility/ other infrastructure	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures
Rooding network <ul style="list-style-type: none"> <li>Sparks from vehicle malfunction, discarded cigarettes</li> <li>Spark causing activities during road maintenance and mowing</li> </ul>	☒	☒	☐

### Recreational locations

The International Mountain Bicycling Association has appointed the mountain biking trails at Bike Taupō (surrounding Taupō area) as a silver-level IMBA Ride Centre.

### Cultural and recreational activities and events

Tangata whenua have very strong ties to their whenua (land) and culture, and value being able to use their whenua without unnecessary restrictions.

We will consult with tangata whenua and consider the needs of iwi when making decisions about implementing restrictions or prohibitions with our fire control powers. The relevant iwi for this zone are listed as stakeholders.

Large scale events that might be cancelled because a restriction on activities can have a significant economic impact.

Placing restrictions or prohibitions on fire hazardous activities should not impose any unreasonable restrictions on people living and enjoying recreational activities in this zone.

Cultural and recreational activities and events	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures
Cultural cooking, e.g. Hāngī	☒	☒	☐
Fireworks <ul style="list-style-type: none"> <li>Use may be prohibited during high fire danger</li> </ul>	☒	☒	☐
Mountain biking <ul style="list-style-type: none"> <li>Access may be restricted during high fire danger</li> </ul>	☐	☒	☐

### Special risk areas

Due to the values at risk, public conservation lands are kept in a restricted fire season when they are not in a prohibited fire season. Even when the surrounding zone goes to an open fire season, public conservation land will remain in a restricted fire season.

### Known fire hazards

There are no long-term fire hazards listed for this zone in the Fire Hazard Removal Case Management System.

### Frequency of elevated fire danger

On average, this area experiences:

- 9 days of very high to extreme fire danger (based on Scion fire danger climate data for seasonal severity)

**Fire history** There have been several vegetation fires, however none have triggered a third alarm or higher response.

**Predominant fuel type** The predominant fuel type in this zone is grasslands and exotic forestry.

## Thresholds

**Fire seasons** Build-up Index and the degree of grass curing (GC%) are the most relevant fire weather indices to monitor where there is a mixture of forestry and grasslands as the predominant fuel types.

Grass Curing (GC%)	Build Up Index (BUI)		
(%)	0-40	40-80	>80
0-60	Open	Restricted	Prohibited
60-90	Restricted	Restricted	Prohibited
90-100	Prohibited	Prohibited	Prohibited

**Prohibition on fires in open air (section 52)** We can use the same Fire Weather System trigger thresholds for prohibiting fires in the open air under section 52 as we do for changing to a prohibited fire season, but use section 52 when the fire risk conditions are not expected to last long enough to make changing to a prohibited fire season practical.

Other local thresholds have not been set.

## Prohibitions or restrictions on activities (section 52)

In addition to the above trigger thresholds for changing fire seasons, there will be days where we consider that fire danger conditions are very high or extreme.

We will use forecast data including elevated temperatures, strong winds, low humidity, Fine Fuels Moisture Code (FFMC) to predict these events. We may prohibit activities on these days which have the potential to produce sparks, farming operations such as land clearing and discing, grinding/welding, roadside mowing, steam and traction operations, forestry operations and automatic reset on power lines may be prohibited.

We will communicate this to communities and stakeholders as per the communication plan.

### Forestry operations

Some forest owners may continue work during an elevated fire danger. A Buildup Index trigger of 100 to 120 may be considered if the forest companies will mitigate the risk by having set numbers of firefighters, heavy machinery and helicopters on stand-by, which may include patrolling work sites for an hour after operations cease. Parking heavy machinery on clear skid sites, blocks and working ropes are checked before leaving (Skyline Hauler Operations).

We will consult with forestry companies on setting BUI triggers and restricting forestry operations based on their current proactive and successful work.

### Controlled burning

We have had a number of controlled burns on farms escape into neighbouring properties, so will work on educating our farming communities about safe burning in the outdoors, and ensuring permit conditions are met.

**Roadside mowing**

We will advise local authorities of the prohibited season and suggest they cease mowing or similar until prohibition ends. If any emergency works are needed, we'll suggest carrying out works using hand tools, or doing the work at dawn or dusk.

**Mowing, ploughing or harrowing fields**

We will consult with local landowners on what mitigations they will apply during times of increased fire risk. We will advise of fire season changes via normal channels (Federated Farmers etc.) and suggest that operation cease until conditions are suitable.

**Hot works**

We will advise of fire season changes via normal channels and suggest operation cease until conditions are suitable. If any emergency works needed, they would use their own procedures and policies.

We are working on:

- Educating companies that do hot works
- Using the Forest Fire Risk Management Guidelines as an educational tool
- Establishing relationships with these local companies
- Establishing working relationships with Federated Farmers, and local forestry companies.

**Cultural cooking fires**

Cultural cooking fires have been known to escape during extreme fire risk conditions. Cultural cooking fires are allowed during prohibited fire seasons without a permit in most cases, so we will work with our communities to educate them about safe use of cultural fires.

More information is available at <https://checkitsalright.nz/reduce-your-risk/hangi-umu-and-lovo>

**Powerline auto-reclosures**

We will advise lines companies of fire season changes via normal channels and suggest operation cease until conditions are suitable.

**Representative remote automated weather stations**

The Remote Automated Weather Stations (RAWS) used to determine whether we have reached the trigger thresholds are:

Tihoi	National Park township	Rotoaira
Taupō	Hautū	

We will consider the forecast for these locations when declaring or revoking a fire season. We will look at the RAWS as a group to inform fire season changes.



**Taupō Zone stakeholders**

Stakeholder	Fire plan development	Fire plan amendment	Changing fire season to prohibited	Section 52 fire prohibitions	Section 52 restrictions/prohibitions on activities
Taupō District Council	Consulted while creating plan	Consult while amending plan	Notify of decision	Notify of decision	Notify of decision
Department of Conservation: • Central North Island conservancy	Consulted while creating plan	Consult while amending plan	Notify of decision	Notify of decision	Notify of decision
Forestry Companies • NZ Forest Managers (Tūrangi)	Consulted while creating plan	Consult while amending plan	Notify of decision	Notify of decision	Notify of decision
Public	Public consultation	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels

If your organisation should be involved in fire plans, and have an interest in this zone, please contact us about being added to this list.

## Public conservation land

<b>Geography</b>	<ul style="list-style-type: none"> <li>• Pirongia Forest Park</li> <li>• Coromandel Forest Park</li> <li>• Tongariro National Park</li> <li>• Kaimanawa Forest Park</li> <li>• Pureora Forest Park</li> <li>• Whirinaki Te Pua-a-Tāne Conservation Park</li> </ul>
<b>Climate/weather</b>	Climate across public conservation land (PCL) relate to climate as shown in other Waikato zones.
<b>Land cover</b>	<p>Land cover in public conservation land includes:</p> <ul style="list-style-type: none"> <li>• High country tussock land</li> <li>• frost flats</li> <li>• Podocarp forests</li> <li>• Beech forests</li> <li>• peat wetlands</li> <li>• Coastal broadleaf &amp; pōhutukawa forests</li> <li>• Mānuka/kānuka scrub communities</li> </ul>
<b>Special risk areas</b>	None known
<b>Known fire hazards</b>	There are no long-term fire hazards listed for public conservation lands in the Fire Hazard Removal Case Management System.
<b>Fire history</b>	No known fire history in public conservation lands.
<b>Thresholds</b>	
<b>Restricted seasons year round</b>	<p>Due to the values at risk, public conservation lands are kept in a restricted fire season when they are not in a prohibited fire season. Even when the surrounding zone goes to an open fire season, public conservation land will remain in a restricted fire season.</p> <p>Thresholds for declaring or revoking a prohibited fire season are the same as the thresholds for the surrounding zone.</p>

Public conservation land map

