

Fire Plan

Tāmaki Makaurau – Auckland

2024–2027



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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's document management processes.

Requests or recommendations for changes to this material should be sent to the District Manager Tāmaki Makaurau. See [Local contacts](#).

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Document information

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Approval

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Title: Region Manager, Te Hiku

Date: 15 July 2024



Signature

Introduction

How to use this document

The front sections of this document cover:

- general information about fire plans
- the basics of Fire and Emergency New Zealand's fire control powers
- how we use these powers to reduce the risk of unwanted fires, particularly in the open air

The back section, [Tamaki Makaurau - Auckland information](#), is for specific local information about this fire plan area. 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](#) (the Act) 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 NZ'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 NZ 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
 - prohibit fires
 - restrict activities that may cause unwanted fires
- apply our other powers to manage fire hazards or require firebreaks.

These explanations help people 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

This Fire 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.

Fire plans are not about how we fight fires in the local area, or the resources available to do so.

Fire plans must do the following:

Describe local fire risk conditions

A fire plan 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.
- can be broken down into specific zones within the area where fire risk conditions or control measures differ.

Set out policy

A fire plan must set out the policy for fire control in the local area. It must specify when and why we:

- restrict or prohibit fires in the outdoors
- restrict activities that may cause unwanted fires
- manage fire hazards
- require firebreaks.

Set out procedures

A fire plan must set out fire control procedures for the local area. These include:

- details of the processes that Fire and Emergency will follow
- 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 recreational and economic activities unnecessarily.

Take Fire and Emergency NZ's other requirements, agreements and policies into account

A fire plan must be consistent with:

- Fire and Emergency's national strategy
- any local planning by Fire and Emergency for 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. The first part of this template highlights policies that impact our regulatory role. However, fire plans must comply with other Fire and Emergency internal policies, such as records management.

Cover the entire area

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.

Set out Fire and Emergency NZ's fire control powers

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 these fire plans, 'local area' is the area within each Local Advisory Committee's (LAC's) boundaries.

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 LAC for the local area are set.

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

Zones

When dividing a local area into zones, we consider factors such as climatic conditions, geographical features, land use or territorial authority.

We also look at previous analyses of the wildfire threat.

Applying fire seasons to zones

When we apply fire seasons to a zone, we consider:

- whether the season makes sense from a fire science point of view
- how we can communicate to the public where the boundaries are

Consultation

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

Publish a notice

The notice should:

- outline the proposed plan
- state where you can see and read a copy of the plan
- state how you can make a submission on the plan and where to send your submissions
- give the closing date and time for submissions

It must be published in the Gazette, or in a newspaper circulating in the local area, or a website

Consider submissions

Fire and Emergency New Zealand must consider every submission received by the submission closing date and time.

Include a list of key stakeholders

A fire plan should include a list of key stakeholders in the local area, and zone information. Stakeholders include those who:

- were involved in creating the plan
- should contribute to maintaining it and making relevant decisions

Record stakeholder engagement

Fire and Emergency will record stakeholder engagement and their inputs in the fire plan's stakeholder engagement plan.

Review and amendment

Fire and Emergency may amend a fire plan at any time.

However, 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 either:

- confirm that the fire plan is still appropriate for that area
- amend the fire plan as necessary and consult on changes

4 Rs of emergency management

The '4 R's' sum up New Zealand's approach to emergency management – reduction, readiness, response and recovery.

Fire plans are a part of the reduction space. Previous fire plans issued under the old rural fire authorities also included readiness and response. We now put that information in our other planning work and operational procedures.

The following sections outline the work Fire and Emergency does in each of the 4 R's.



Reduction

Reduction means:

- identifying and analysing long-term risks to human life and property
- taking steps to eliminate these risks if practicable
- 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. This framework includes:

- these fire plans
- our fire control powers for reducing the likelihood of unwanted fire from the use of fire in the open air
- our fire control powers for reducing the likelihood of other causes of wildfire by 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

Readiness means developing operational systems and capabilities before an emergency occurs. These include 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, including rural communities
- work with local government around provision of water for firefighting
- Response and tactical plans (how we plan to respond to a particular site or location.)
- fire weather data and indices that determine the fire danger rating.

Response

Response means:

- attending incidents
- taking any actions from the time our communications centres are notified until to the incident controller moves the incident to recovery phase.

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

Note: This fire plan is not a response-related plan.

Recovery

Recovery means helping people who have suffered loss and trauma to receive the appropriate support. It involves 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:

- during 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
- helping 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 communities to pre-plan for major events
- 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 working 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, cooking, recreation, comfort, and warmth.

The National Framework for Fire Control consists of policies, procedures, tools and agreements that enable Fire and Emergency to manage fires. The framework supports people to use fire safely where appropriate and restricts or prohibits its use when there is a risk of unwanted fire.

The public face of the framework is:

- the [Checkitsalright.nz](https://checkitsalright.nz) website
- the [fire permit application system](#)
- these fire plans
- additional information on our public website – fireandemergency.nz

This plan outlines Fire and Emergency’s statutory fire control powers and how we can apply them to help reduce risk by:

- 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

This table sets out the current internal policies and supporting processes that guide our decisions and actions.

Policy	Detail
Fire seasons, prohibitions and restrictions policy	<p>Relates to sections 52 to 58 of the Act and decisions to:</p> <ul style="list-style-type: none"> • declare or revoke a prohibited or restricted fire season • prohibit fire in open air or revoke a prohibition • prohibit or restrict activities that may cause a fire to start or spread and revoke prohibition or restriction
Fire permitting policy	<p>Supports the policy above and defines actions for:</p> <ul style="list-style-type: none"> • supporting a member of the public who is applying for a fire permit • assessing a fire permit application • granting or renewing a fire permit • refusing to grant or renew a fire permit • suspending or cancelling a fire permit • operational decisions when responding to an alarm of fire in open air
Firebreaks policy	<p>Relates to sections 62 to 64 of the Act to support decisions and actions relating to requirements for landholders to:</p> <ul style="list-style-type: none"> • make and clear any firebreak on the landholder’s land • remove any vegetation or other thing from an existing firebreak
Fire hazard removal policy	<p>Relates to sections 65 to 68 of the Act and decisions about what to do when:</p> <ul style="list-style-type: none"> • a potential fire hazard is reported to Fire and Emergency • we assess a potential fire hazard • we arrange for the removal or destruction of a confirmed fire hazard
Regulatory compliance policy	<p>Covers 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:</p> <ul style="list-style-type: none"> • reduce harm from unwanted fire • support the safe use of fire as a land management tool and reduce harm if fire escapes control • minimise avoidance of the Fire Emergency levy • reduce non-compliance with any legislation or regulations under which Fire and Emergency New Zealand has a compliance function

Fire risk conditions

The Act defines the circumstances where we can use our fire control powers to prohibit fire and or restrict other activities 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.

The Act defines fire risk conditions 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.

Decision-makers must be satisfied that:

- fire risk conditions, and potential ignition sources exist or are likely to exist in the area
- these will endanger people or property by increasing the risk of outbreak or spread of fire

They make decisions based on evidence, not for the convenience of Fire and Emergency.

This table sets out other fire risk conditions we consider to be fire risk conditions for the purposes of exercising our fire control powers.

Condition	Description
Fire weather science	The NZ Fire Danger Rating System includes measures such as: <ul style="list-style-type: none"> • Build-up Index (BUI) • Initial Spread Index (ISI) • Fire Weather Index (FWI) • Grass Curing percentage (GC) • Fine Fuel Moisture Code (FFMC) • Drought Code (DC)
Topography	Factors that influence how a fire spreads, including: <ul style="list-style-type: none"> • steepness of slope • direction fire is facing, i.e., aspect • terrain features, e.g., gullies and chimneys
Fuel behaviour models	The characteristics of fuel, or vegetation, that contribute to fire ignition and spread.
History of fires	History of recent fires and their ignition sources in the area, based on available fire data.
Socioeconomic 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"> • life values, e.g., size of land parcels in an urban area

Condition	Description
	<ul style="list-style-type: none"> distance from commercial forestry
Ability to respond effectively	<p>Factors that contribute to our ability to respond to an out of control fire include:</p> <ul style="list-style-type: none"> availability of response resources, i.e., people and equipment isolation accessibility issues availability of water supplies
Impacts from natural hazards	Natural hazard impacts 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 and Emergency uses fire seasons to:

- inform people about the requirements for, or restrictions on lighting fires in the open air
- manage the use of fire to protect communities from the consequences of unwanted fire

There may be other legal requirements and regulatory approvals needed for a fire under other legislation, such as the [Resource Management Act 1991](#), or Council by-laws. It is your responsibility to comply with all other legislation and get all other necessary approvals.

Fire and Emergency can declare or revoke a prohibited or restricted fire season in an area. We use our fire seasons, prohibitions and restrictions policy, and associated processes including stakeholder and partner consultation) to manage this.

Fire seasons are applied to geographic zones based on:

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

There are three types of fire season in force at any time in an area or zone:

Open fire season



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

Restricted fire season



Lighting a fire is riskier than usual and you must get a fire permit from Fire and Emergency NZ. This permit may also have specific conditions to make sure you can light a fire safely and that it will 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 people 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.

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. To help you to use fire safely, we have a set of guidelines for fire types that you should follow even when there are no restrictions or prohibitions in place. See the [Authorised fire types, descriptions and conditions](#) table below for guidance.

Note: This does not mean that you can light fires anywhere you want to. You should still check the conditions at checkitsalright.nz and follow any advice provided.

Those lighting a fire have a duty of care to ensure that fire remains under control and is fully extinguished once complete. [Section 60 \(1\)](#) of the Act requires that: ‘A person must not cause or allow a fire to get out of control and to spread to vegetation or property.’

Other legislation or regulatory requirements, such as local council or regional council by-laws 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 management, so that we can share advice on how and when to light and use your fire safely. Go to our [Fire Permit website](#). Select **Lighting a fire in an open season** and complete the address info or use the map. Once the address information updates and confirms an open fire season, select the **Notify Us of your fire** button at the bottom of the screen and complete the form.

This also helps us manage notifications about your fire that might be made by members of the public.

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 lets us know where and when fire is being used. This means our fire brigades don’t need to respond unnecessarily.

It also gives us an opportunity to advise how to light and use the fire safely. We can also apply conditions for when the fire can be lit, how big it can be, or any other requirements that reduce the chance of the fire escaping control. Go to firepermit.nz to check and apply

Note: When you get a permit, you must read and follow the conditions of that permit.

Prohibited fire seasons

When the fire danger reaches higher levels, we need to stop people from lighting fires that may escape. 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 are a consistent, scientific way to monitor fire danger in an area.

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

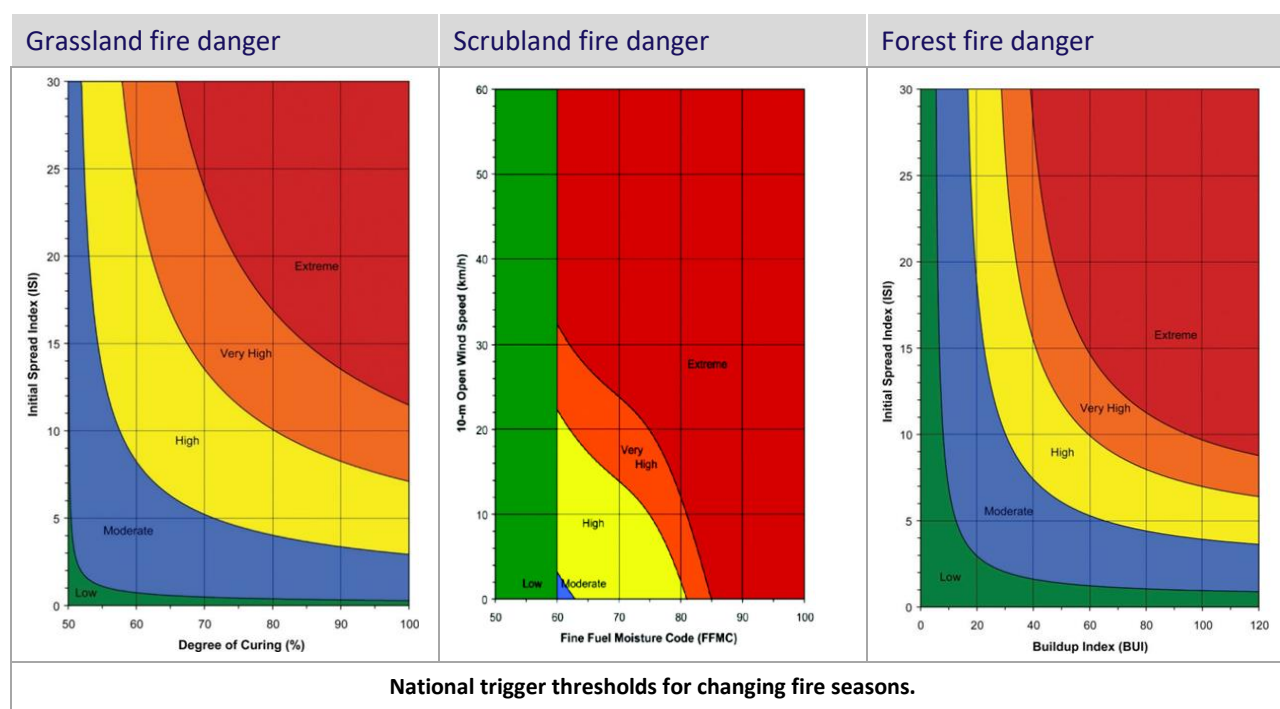
The trigger thresholds use:

- 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 consultation with partners, resource availability or other emergency events, may also influence 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. 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)

Fire and Emergency may sometimes need to prohibit fires in the open air outside the usual fire season changes. These occasions are known as Extreme fire, Red Flag Days or Cross-Over conditions. Examples of when we might use these powers are:

- during large or multiple incidents that put firefighting resources under strain
- when extreme fire weather conditions occur during a restricted fire season, e.g., strong dry winds, high temperatures associated with very low humidity
- when emergency events occur, e.g., a 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 that indicate that the prohibition or restriction is necessary or desirable for fire control.

Fire and Emergency may also prohibit fires in the open air while any pandemic support legislation, such as the [Epidemic Preparedness \(COVID-19\) Notice 2020](#), is in force. Fire and Emergency can do this without needing to consider fire risk conditions or other factors. This might happen if our response capabilities are affected by any pandemic, 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](#) of the Fire and Emergency New Zealand Act 2017.

If someone breaches the ban, they can be charged under [section 54](#) of the Act.

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 we've agreed with stakeholders on set thresholds for implementing a [section 52](#) restriction or prohibition, we'll include these 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. These occasions are known as Red Flag Days or Cross Over conditions. Examples of these activities include but are not limited to:

- roadside mowing
- 'hot works' – cutting or welding operations outdoors using portable gas, disc grinder or arc welding equipment that produces sparks, flames or heat
- chainsaw use or scrub-cutting
- mowing, ploughing or harrowing fields
- use of retail fireworks and, in certain conditions, pyrotechnics (See the [Retail fireworks](#) and [Pyrotechnics](#) sections below)

[Section 52](#) of the Act allows us to prohibit or restrict one or more activities in an area or areas when we assess 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
- it's not possible to adequately mitigate the assessed risk

The following table defines prohibition and restriction:

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"> the times of the day the manner in which it is undertaken

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:

- supplying and distributing of food, water, fuel, power, and other necessities
- maintaining transport and communication facilities that are essential to the well-being of the community
- maintaining the health of the community
- maintaining law and order, public safety, and the defence of New Zealand
- preserving 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, we will use [section 52](#) to apply the restrictions or prohibitions to everyone within the zone when either:

- 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

Our policy for fire seasons, prohibitions and restrictions says that we only prohibit or restrict activities if:

- we have engaged with stakeholders
- they are unable to satisfactorily mitigate the identified risks

Legally restricting or prohibiting activities can have a significant economic impact, so we won't do it without due consideration.

If we've agreed with stakeholders on set thresholds for implementing a [section 52](#) restriction or prohibition, we'll include these 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 example trigger point tables and what fire prevention actions are suggested during different fire danger levels. Fire and Emergency supports these guidelines.

The National Environmental Standard – Commercial Forestry (NES-CF) regulations and SCION research confirms that the risk of heating and spontaneous combustion in slash can be reduced by eliminating embedded rubbish (metal), monitoring depth and compaction of slash piles and local fire environment conditions.

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

Powerline auto-reclosers

Most power companies use a computer-controlled auto recloser system. This attempts to reconnect the power up to three times after a fault before a technician is dispatched. If a downed wire is the cause of the fault, 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 fire weather website www.fireweather.niwa.co.nz will be updated to display the locally decided levels.

To comply with the [Electricity \(Hazards from Trees\) Regulations 2003](#), power companies also take other risk reduction measures. These include trimming trees around power lines, reporting faults to the public, putting power lines underground, and giving guidance on tree planting.

Hot works

This includes activities such as welding, grinding, and metal cutting.

If local trigger values have been set, they will be listed in the zone information in this document. NIWA's fire weather website www.fireweather.niwa.co.nz 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 rural land managers to discuss the approach to fire measures, using machinery and equipment during high fire danger periods, and the potential effect on local landholders and communities.

Retail fireworks and pyrotechnics

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

The term 'firework' is reserved for retail fireworks that are specifically sold to the public. A display of 'fireworks' does not require written agreement from Fire and Emergency. However, pyrotechnics are classed as a hazardous substance and must be under the control of a person who holds a certified handler compliance certificate for the substances they are working with. This person must get written approval from Fire and Emergency before they hold a display.

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

Fireworks

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

Council by-laws may limit where and when fireworks may be used.

Whether fireworks should be banned is a decision for the 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, so we advise the public on using fireworks safely. We recommend people attend publicly organised displays where possible.

Pyrotechnics

Applications for indoor and outdoor pyrotechnic displays need to comply with sections [9.35](#) and [9.43](#) of the Health and Safety at Work (Hazardous Substances) Regulations 2017.

The person in charge of a pyrotechnics display must get written agreement from Fire and Emergency before holding the display.

The exception to requiring written agreement is for a class 1 category G pyrotechnic display. This is where the pyrotechnics are used for special effects (e.g., film set) and there is no intention to display them to the public.

Fire and Emergency is not an enforcement agency for hazardous substances.

Fire and Emergency's agreement or otherwise to a specific pyrotechnic display proceeding will be determined in accordance with Fire and Emergency's policy and standard operating procedures relating to the same.

Sometimes, after we consider the relevant risk conditions in a particular area, we may decide that, even where the requirements of the Health and Safety at Work (Hazardous Substances) Regulations 2017 could be met in terms of controlling fires igniting within an exclusion zone, the risk to the surrounding area outside of any exclusion zone nevertheless requires a prohibition or restriction of pyrotechnic displays generally under [section 52](#). However, we are only likely to do this in situations where, for example, the terrain, weather and substrate are such that there is a risk of a pyrotechnic display causing fire to ignite outside of any exclusion zone in the area.

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. This means they need to know:

- the current fire season in the area
- whether any other prohibition applies
- whether a permit is required

We notify our communities, stakeholders, and partners of fire season changes and restrictions and prohibitions under [section 52](#) of the Act in several ways. These include:

- 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
- on the Check It's Alright website checkitsalright.nz
- via information available by phoning 0800 658 628
- with fire danger or fire season signs – we change these to reflect season status by adding 'Fire by permit only', '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. This is to build awareness of the dangers of wildfires and promote positive behaviour changes. Since fire danger/fire risk conditions are locally specific, Districts will make local decisions about the best ways to communicate this to their communities.

We can also target messaging using traditional and digital media, such as social media and on-demand video, at affected areas at the most effective times.

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

The 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 type and size of the proposed fire, along with the current local fire risk conditions. To check and apply for a fire permit, visit firepermit.nz.

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.

We may also suspend or cancel fire permits in certain circumstances, such as:

- where fire risk conditions change
- for fire control purposes
- as fire seasons change or we imposed prohibitions

Under [section 190\(8\)](#) of the Act, granting a fire permit does not impose any liability on Fire and Emergency.

Council by-laws, 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, so even if we've issued a fire permit, you may still not be allowed to light your fire due to other requirements.

Even if you don't need a fire permit from us due to an open fire season etc., you may not be able to light fires in some places. You must also follow council by-laws and regional plan rules relating to smoke and air pollution.

Managing smoke nuisance comes under local government jurisdiction and not Fire and Emergency's 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 the:

- type of fire
- 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.

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

The following table lists the fire types that are authorised in a restricted season and the conditions for using them. As long as people using these fire types in a restricted season meet these conditions, they don't need to get a fire permit, because Fire and Emergency doesn't consider them to be fires in open air.

Fire type	Description and conditions
Gas-operated appliances	<p>Manufactured gas-operated appliances, such as barbecues, outdoor fireplaces and outdoor gas heaters.</p> <p>Find out more about the safe use of Gas BBQs, cookers and heaters.</p>
Charcoal barbecues or grills	<p>Barbecues or grills that use either charcoal briquettes or natural lump charcoal as their fuel source.</p> <p>Conditions</p> <ul style="list-style-type: none"> • Don't use on an apartment balcony, deck, under a roof overhang or within other enclosed areas. • You must have a suitable way to extinguish the fire within easy reach – a maximum of 5 metres away. • You must not leave the fire unsupervised while burning <p>If you cannot meet these conditions, you must apply for a permit.</p>
Open-top liquid fuel cooker	<p>Examples include (but are not limited to) portable smokers.</p> <p>These are usually small portable cooking devices that are liquid-fuelled with an open fuel container either under or in the cooking device.</p> <p>Conditions</p> <ul style="list-style-type: none"> • Must be on a non-combustible area/base. • You must have a suitable way to extinguish the fire within easy reach – a maximum of 5 metres away. • Don't light your fire within 3 metres of any part of a building, hedge, shelter belt or any other combustible material. • You must not leave the fire unsupervised while burning. <p>If you cannot meet these conditions, you must apply for a permit.</p>
Non-pressurised liquid-fuelled heaters	<p>Examples include (but are not limited to) frost pot, smudge pot, diesel heater.</p> <p>Usually fuelled by diesel, vegetable oil, kerosene or waste oil.</p> <p>Conditions</p> <ul style="list-style-type: none"> • Must be at least 3 metres clear of any part of a building, hedge, shelter belt or any other combustible material. • Must be placed on a non-combustible surface, not directly on grass or wooden decks. • You must not use the heater in small, confined areas. • If refuelling, ensure heater has cooled down before refilling. • You must not leave the fire unsupervised while burning. <p>If you cannot meet these conditions, you must apply for a permit.</p>
Permanent outdoor fireplace	<p>Purpose-built or manufactured woodburning fireplace/wood oven with an open front and a vertical smoke vent/chimney.</p>

Fire type	Description and conditions
Wood-fired pizza oven/wood oven	<p>Generally constructed of concrete, concrete blocks, stone, or bricks, fixed in place (not mobile/movable).</p> <p>Usually in home outdoor entertaining areas.</p> <p>Conditions</p> <ul style="list-style-type: none"> • Must have a non-combustible hearth or base that extends a minimum of 500 mm either side of the left and right edges and a minimum of 1 metre from the front edge of the fire box. This is to stop any burning material falling from the fire box landing onto anything combustible. • Smoke vent/chimneys must have a purpose-built manufactured cap, or maximum of 5 millimetre steel mesh fitted in the top to stop any hot ash or embers from escaping. • Firewood storage must be in areas not affected by heat from the fire and clear of any possible hot ash or ember-affected areas. • You must have a suitable way to extinguish the fire within easy reach – a maximum of 5 metres away. • You must not leave the fire unsupervised while burning, or • It must have a solid or mesh screen/door that prevents any burning material from escaping the fire box. • Fireplaces with external construction made of steel must be at least 1 metre clear of any part of a building, hedge, shelter belt or any other combustible material. <p>If you cannot meet these conditions, you must apply for a permit.</p>
Movable/ portable free-standing front-loading fireplace.	<p>Examples include (but are not limited to) chiminea.</p> <p>A freestanding front-loading fireplace or oven, usually with a bulbous body – usually has a vertical smoke vent or chimney.</p> <p>Conditions</p> <ul style="list-style-type: none"> • Don't light your fire within 3 metres of any part of a building, hedge, shelter belt or any other combustible material. • You must have a suitable way to extinguish the fire within easy reach – a maximum of 5 metres away. • You must not leave the fire unsupervised while burning or • It must have a solid or mesh screen/door that prevents any burning material from escaping the fire box. <p>If you cannot meet these conditions, you must apply for a permit.</p>
Cultural cooking fires	<p>Conditions</p> <p>Examples include hāngi, umu and lovo.</p> <p>Conditions</p> <ul style="list-style-type: none"> • Your fire area must be less than 4 square metres. • Don't light your fire within 5 metres of any part of a building, hedge, shelter belt or any other combustible material. • You must have a suitable way to extinguish it within easy reach – a maximum of 5 metres from your cultural fire. • You must not leave the fire unsupervised while burning. • On completion of cooking or the purpose required for cooking food the fires must be extinguished. <p>If you cannot meet these conditions, you must apply for a permit.</p>

Fire type	Description and conditions
	Find out more about the safe use of Cultural cooking fires .
Braziers Fire pits/bowls (Recreational)	<p>Brazier: a container for hot coals – usually an upright standing or hanging metal bowl or box.</p> <p>Fire pit/bowl: a pit dug in the ground, made from stone, brick or metal, or a bowl on an upright stand.</p> <p>Conditions</p> <ul style="list-style-type: none"> • Your fire area must be less than 1 square metre. • Where hot embers/ash are able to escape, there must be a non-combustible base/tray that will contain these hot embers or ash, to prevent any risk of fire escaping. • Don't light your fire within 3 metres of any part of a building, hedge, shelter belt or any other combustible material. • You must have a suitable way to extinguish it within easy reach – a maximum of 5 metres from your brazier or fire pit/bowl. • You must not leave the fire unsupervised while burning. <p>If you cannot meet these conditions, you must apply for a permit.</p>
Manufactured or drum incinerators	<p>A drum or container, with a mesh or solid lid designed to prevent the escape of hot ash or fire, often with a vertical smoke vent or chimney; designed exclusively for incineration.</p> <p>Conditions</p> <ul style="list-style-type: none"> • Don't light your fire within 5 metres of any part of a building, hedge, shelter belt or any other combustible material. • You must have a suitable way to extinguish it within easy reach – a maximum of 5 metres from your incinerator. • Smoke vent/chimneys must have a purpose-built manufactured cap or maximum of 5 millimetre steel mesh fitted in the top to stop any hot ash or embers from escaping. <p>If you cannot meet these conditions, you must apply for a permit.</p>

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

The following table lists the fire types that are authorised on public conservation land (PCL) in a restricted fire season and the conditions for using them. As long as people using these fire types in a restricted season meet these conditions, they don't need to get a fire permit, because Fire and Emergency doesn't consider them to be fires in open air.

Fire type	Description and conditions
Gas-operated appliances	<p>Manufactured portable gas-operated appliances, such as butane tramping stoves, gas barbeques and outdoor gas heaters.</p> <p>Find out more about the safe use of barbeques and gas cylinders and outdoor gas-operated appliances.</p> <p>Conditions</p> <p>The gas-fire must not be:</p> <ul style="list-style-type: none"> lit if the appliance is not in full operational condition in accordance with the manufacturer's specifications lit unless on a flat, level surface, stable and solid enough to support the weight of the appliance plus any containers and food used during cooking lit unless at least one metre clear of all combustible material lit in conditions where wind or other factors may cause the fire to spread surrounding flammable material left unsupervised while flame is present
Pressurised liquid appliances	<p>Manufactured portable liquid cookers which use liquid under pressure to fuel the cooker. The type of liquid is not specific (e.g., white spirits, kerosene or methylated spirits) but the delivery mechanism is.</p> <p>Note: This excludes cookers using an open top container, non-pressurised system.</p> <p>Conditions</p> <p>The pressurised liquid fire must not be:</p> <ul style="list-style-type: none"> lit if the appliance is not in full operational condition in accordance with the manufacturer's specifications lit unless on a flat, level surface, stable and solid enough to support the weight of all the appliance parts plus any containers and food used during cooking lit unless at least one metre clear of all combustible material lit in conditions where wind or other factors may cause the fire to spread surrounding flammable material left unsupervised while flame is present and/or the liquid is still turned on
Campfires in a permanent fireplace	<p>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.</p> <p>Conditions</p> <p>The campfire in a permanent fireplace must not be:</p> <ul style="list-style-type: none"> lit if the fireplace has any damage that could allow the fire, hot embers, or ash to escape and spread beyond the constructed fireplace within three metres of any combustible material lit where notices and advertising are present which specifically prohibit the lighting of fires

Fire type	Description and conditions
	<ul style="list-style-type: none"> • lit during a prohibited fire season • lit in conditions where wind or other factors may cause the fire to spread surrounding flammable material • left unsupervised while burning and without the ashes being fully extinguished • used to burn rubbish
Cooking and warming fires	<p>Small, open outdoor wood-burning fires are only permitted to be lit on PCL in remote areas and only if required for essential cooking or survival purposes. As a guide, remote areas for this purpose are considered to be at least 3 km from the nearest public road, public vehicle easement accessway or publicly accessible jetty or wharf.</p> <p>Additionally, fires must not be lit in locations fitting the freedom camping criteria, as defined in the Freedom Camping Act (2011).</p> <p>Conditions</p> <p>The cooking and warmth fire must not be:</p> <ul style="list-style-type: none"> • more than 0.5 m diameter x 0.5 m height (including wood and flames) • within three metres of any tree or any place underneath overhanging vegetation; and • within three metres of any log or any dry vegetation • lit unless and until the ground surface within three metres of the site of the fire has been cleared of all combustible material • 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 • lit in National Parks which have bylaws prohibiting the lighting of wood burning fires in the open air • lit during a prohibited fire season • lit in conditions where wind or other factors may cause the fire to spread surrounding flammable material • left unsupervised without the ashes being fully extinguished • used to burn rubbish <p>Note: This applies only to small open fires (as described above). Solid fuel fires, front-loaded portable fires, non-gas barbecues or chimineas are all prohibited fire types on public conservation land at all times.</p> <p>Find out more about the safe use of campfires.</p>

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

This table lists the fire types that are authorised in a prohibited season and the conditions for using them. As long as people using these fire types in a prohibited season meet these conditions, they don't need to get a fire permit, because Fire and Emergency doesn't consider them to be fires in open air.

Fire type	Description and conditions
Gas-operated appliances	<p>Manufactured gas-operated appliances, such as barbecues, gas outdoor fireplaces and outdoor gas heaters.</p> <p>Find out more about the safe use of Gas BBQs, cookers and heaters.</p>
Charcoal barbecues or grills	<p>Barbecues or grills that use either charcoal briquettes or natural lump charcoal as their fuel source.</p> <p>Conditions</p> <ul style="list-style-type: none"> • Don't use on an apartment balcony, deck, under a roof overhang or within other enclosed areas. • You must have a suitable way to extinguish the fire within easy reach – a maximum of 5 metres away. • You must not leave the fire unsupervised while burning. <p>If you cannot meet these conditions, you must apply for a permit.</p>
Open top liquid fuel cooker	<p>Examples include (but are not limited to) portable smokers.</p> <p>These are usually small portable cooking devices that are liquid-fuelled with an open fuel container either under or in the cooking device.</p> <p>Conditions</p> <ul style="list-style-type: none"> • Must be on a non-combustible area/base. • You must have a suitable way to extinguish the fire within easy reach – a maximum of 5 metres away. • Don't light your fire within 3 metres of any part of a building, hedge, shelter belt or any other combustible material. • You must not leave the fire unsupervised while burning.
Non-pressurised liquid-fuelled heaters	<p>Examples include (but are not limited to) frost pot, smudge pot, diesel heater.</p> <p>Usually fuelled by diesel, vegetable oil, kerosene or waste oil.</p> <p>Conditions</p> <ul style="list-style-type: none"> • Must be at least 3 metres clear of any of any part of a building, hedge, shelter belt or any other combustible material. • Must be placed on a non-combustible surface, not directly on grass or wooden decks. • You must not use the heater in small, confined areas. • If refuelling, ensure heater has cooled down before refilling. • You must not leave the fire unsupervised while burning. <p>If you cannot meet these conditions, you must apply for a permit.</p>

Fire type	Description and conditions
<p>Permanent outdoor fireplace</p> <p>Wood-fire pizza oven/wood oven</p>	<p>Purpose-built or manufactured woodburning fireplace/wood oven with an open front and a vertical smoke vent/chimney.</p> <p>Generally constructed of concrete, concrete blocks, stone, or bricks, fixed in place (not mobile/movable).</p> <p>Usually in home outdoor entertaining areas.</p> <p>Conditions</p> <ul style="list-style-type: none"> • Must have a non-combustible hearth or base that extends a minimum of 500 mm either side of the left and right edges and a minimum of 1 metre from the front edge of the fire box. This is to stop any burning material falling from the fire box landing onto anything combustible. • Smoke vent/chimneys must have a purpose-built manufactured cap, or maximum of 5 millimetre steel mesh fitted in the top to stop any hot ash or embers from escaping. • Firewood storage must be in areas not affected by heat from the fire and clear of any possible hot ash or ember-affected areas. • You must have a suitable way to extinguish the fire within easy reach – a maximum of 5 metres away. • You must not leave the fire unsupervised while burning, or • It must have a solid or mesh screen/door that prevents any burning material from escaping the fire box. • Fireplaces with external construction made of steel must be at least 1 metre clear of any of any part of a building, hedge, shelter belt or any other combustible material. <p>If you cannot meet these conditions, you must apply for a permit.</p>
<p>Movable/ portable free-standing front-loading fireplace.</p>	<p>Examples include (but are not limited to) chiminea.</p> <p>A freestanding front-loading fireplace or oven, usually with a bulbous body – usually has a vertical smoke vent or chimney.</p> <p>Conditions</p> <ul style="list-style-type: none"> • Don't light your fire within 3 metres of any part of a building, hedge, shelter belt or any other combustible material. • You must have a suitable way to extinguish that will easily reach it, a maximum of 5 metres away. • You must not leave the fire unsupervised while burning or • It must have a solid or mesh screen/door that prevents any burning material from escaping the fire box. <p>If you cannot meet these conditions, you must apply for a permit.</p>
<p>Cultural cooking fires</p>	<p>Examples include hāngi, umu and lovo.</p> <p>Conditions</p> <ul style="list-style-type: none"> • Your fire area must be less than 4 square metres. • Don't light your fire within 5 metres of any part of a building, hedge, shelter belt or any other combustible material. • You must have a suitable way to extinguish it within easy reach – a maximum of 5 metres from your cultural fire. • You must not leave the fire unsupervised while burning. • On completion of cooking or the purpose required for cooking food the fires must be extinguished.

Fire type	Description and conditions
	If you cannot meet these conditions, you must apply for a permit. Find out more about the safe use of cultural cooking fires – fireandemergency.nz > Traditional or cultural use of fire .

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

The following table lists the fire types that are authorised on public conservation land (PCL) in a prohibited fire season and the conditions for using them. As long as people using these fire types in a prohibited season meet these conditions, they don't need to get a fire permit, because Fire and Emergency doesn't consider them to be fires in open air.

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 Gas BBQs, cookers and heaters .

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 but 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.

Note: Fire and Emergency may grant permits for the purposes of assisting compliance with other legislation such as biosecurity measures. For example:

The Management Agency for the American Foulbrood (AFB) Pest Management Plan implements the Biosecurity (National American Foulbrood Pest Management Plan) Order 1998.

Where AFB is discovered, beekeepers have an obligation within 7 days of becoming aware of that case to destroy all honeybees, bee products, and appliances associated with that infected honeybee colony by burning.

If it's a PROHIBITED fire season – Fire and Emergency New Zealand will promptly (24hrs) produce a District Manager-approved Fire Permits to Burn during a prohibited season, under biosecurity emergency response status.

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

Applying for a permit

To check if a fire permit is required, use the website [checkitsalright.nz](#). If you need a permit, this site will automatically take you to the fire permit website.

When you know you need a fire permit, you can apply:

- online through Fire and Emergency's fire permitting system – [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, they must consider each location.

The assessor must inspect permit applications if:

- they have insufficient information to make a desk-based assessment, or
- 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
 - it involves burning large amounts of material unless the applicant has a history of successfully managing similar fires

The follow additional factors can be considered to be fire risk conditions or relevant fire control matters:

- 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
- consider how to undertake the proposed fire safely.

The applicant is responsible for developing the [prescribed burn plan](#). However, we can advise them what the plan should contain to carry out 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:

- immediately before lighting a fire you must 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. Use [Checkitsalright.nz](https://www.firepermit.nz/).

The permit will also include a condition to notify the Communications Centre immediately before lighting the fire. For example:

- notify us before lighting the fire using the text code or email links provided or at <https://www.firepermit.nz/FENZ/Default.aspx>.
- call Southern fire communications on 0800 336 922.

For fire permits where the public are likely to notice the fire and call 111, we prefer you notify us electronically.

For example, where the fire:

- is close to a road, or to other houses or buildings
- covers a large area, such as land clearing

During an open fire season, you can notify us by contacting the [fire Communications Centre](#), or preferably by clicking **Need to notify us** on [firepermit.nz](https://www.firepermit.nz/) and completing the **Permit Activation** form.

These notifications are flagged within the call centre system, so if they get a 111 call, it's clear there is a permitted/controlled 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 lower flammability or removing all vegetation down to mineral earth.

Sections [63–68](#) of the Act explain appeal provisions and compliance pathways.

We use our [Firebreaks policy and guideline](#) to apply the relevant science-based calculation to check if a fire break is the right solution. The policy guides us on working closely with affected landholders to reach a voluntary solution.

Fire and Emergency has powers to:

- require compliance
- make or clear any firebreak
- issue an infringement notice if compliance is not reached voluntarily

Note: 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

Sometimes, Fire and Emergency reasonably considers 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. In these situations, we can require that the vegetation or thing be removed or destroyed.

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

Our fire hazard removal powers apply to anything on the 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 danger) we can tell you, and immediately fix the problem ourselves to keep people and property safe.

Reporting fire hazards

Anyone who becomes aware of a fire hazard, or is worried that something is a fire hazard, can report it to Fire and Emergency.

To do this:

1. Go to [Fire hazards in your community](#).
2. Scroll down the page and choose **Submit a Fire Hazard Assessment Request**.
3. At the bottom of the page, under **Report a Potential Fire Hazard**, click **Start process**.
4. Complete the 'Potential Fire Hazard Advice' form.

Assessment of fire hazards

Fire and Emergency will assess whether there is a potential for the fuel to harm people or damage 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
- it is more appropriate to educate the complainant or occupier/owner of the location of the potential fire hazard on how to mitigate risks from fires
- to refer the matter 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? Considers 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 following 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
1-5	No further action.
6, 8, 9	Consider providing information/education to 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.
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.
20, 25	May issue a voluntary compliance letter citing a timeframe to meet that compliance. Failure to comply means the assessor must issue a <i>Fire hazard removal notice (s 65)</i> . Consider if an <i>Imminent danger notice (s 68)</i> is appropriate

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, or imminent danger. The matter may be referred to another agency, such as the local council if appropriate, e.g., hoarding or vermin infestation.
- 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. We would do this where the notice threshold has not been reached but the assessment indicates that proactive action would be helpful.
2. Giving the occupier or owner of the land the opportunity to voluntarily mitigate the risk within an appropriate time period. We would do this if the threshold for issuing a Fire hazard removal notice ([section 65](#)) has been met. If the occupier or owner won't do this voluntarily, we will issue them with a Fire hazard removal notice ([section 65](#)). This notice gives them one month to remove or destroy the vegetation or other thing increasing the risk of the outbreak or spread of fire.
3. Give the owner or occupier of the land verbal notice 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](#). We would only use this power when there is an 'almost certain' likelihood of a fire starting or spreading at any moment that would put life or property at risk.

Note: We will use this power very rarely.

Powers of entry

We will not enter private property without permission from the occupier other than to knock on the front door or other entry point to find and speak with an occupier.

If the occupier doesn't give us permission or we can't find them, we will attempt to assess the potential fire hazard from outside of the property. For example, we might view it from the roadside or from a neighbouring property if the neighbour consents to us entering their property.

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) 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 as 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)

A 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 we've 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

Before we issue a fire hazard removal notice, we will always try to negotiate with the occupier or owner to give them an opportunity to fix the issue voluntarily.

The occupier of the land where the fire hazard is located is primarily responsible for removing or destroying it. 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 Regulatory compliance policy. Our [Regulatory compliance guide](#) has details of our approach to compliance.

Our compliance activities generally focus on education and awareness first, followed by issuing warnings. If compliance is still an issue, then we may use more formal enforcement powers.

If there are cases of serious or repeated non-compliance, we may use infringement notices or prosecute. For more information on our regulatory compliance policies and procedures and other relevant topics, visit [Regulatory compliance](#).

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 Regulatory Compliance Group on 0800 336 942

Local contacts for this plan

To communicate with the District team for this fire plan please email countiesmanukau@fireandemergency.nz

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 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 how 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 spread 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., primary production (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.

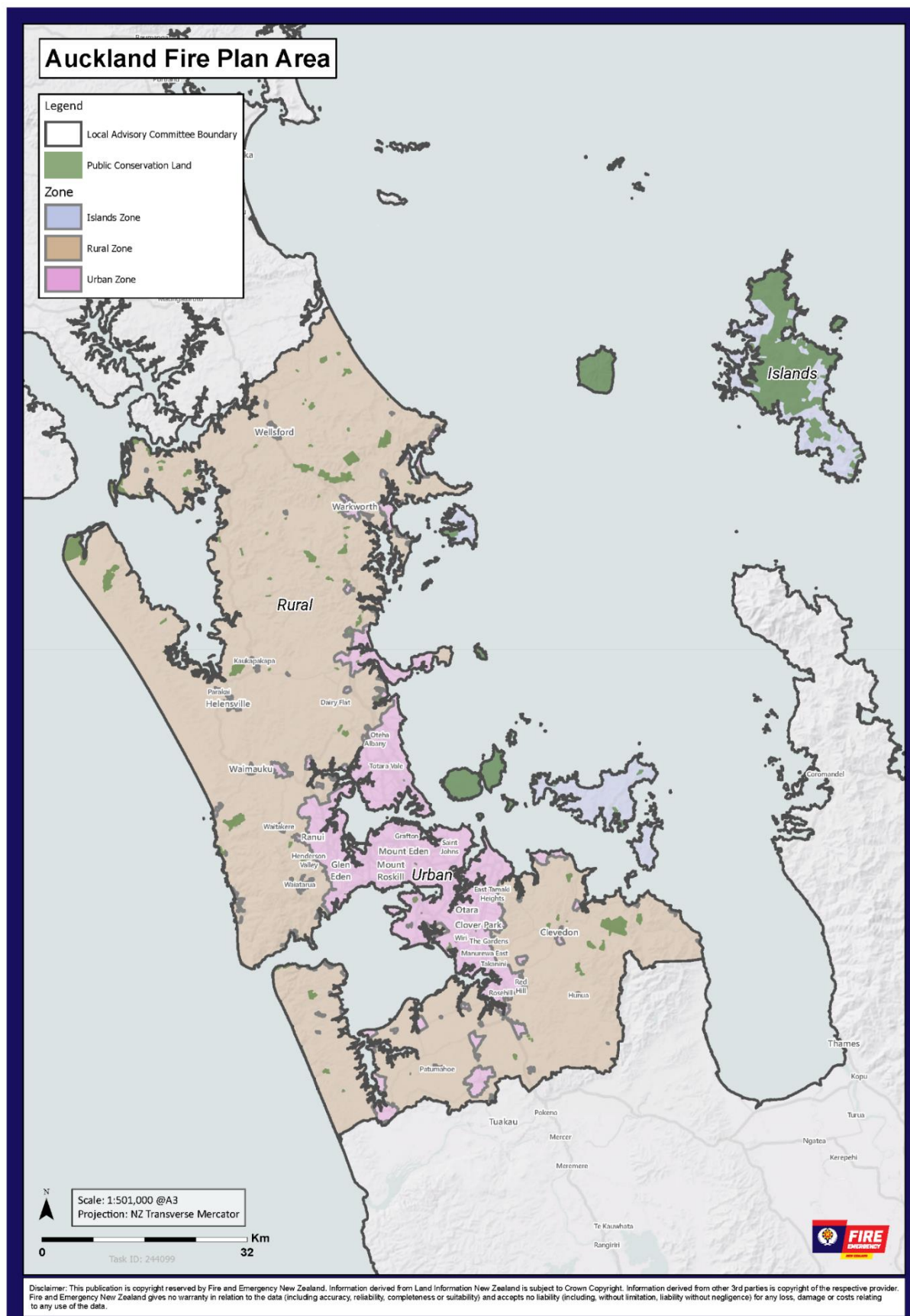
Public conservation land (PCL) – Land used for conservation purposes, including National Parks and forest parks. Often managed by Department of Conservation or the regional council.

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.

Tāmaki Makaurau - Auckland 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 geographic boundary of Tāmaki Makaurau – Auckland includes an area of 6,379 km². The varied fire environment of the area makes it vulnerable to multiple fire risks.

Situated on an isthmus, there are four natural harbours (the Waitematā, Manukau, Kaipara and Mahurangi) and over 2,000 km of coastline on the east and west coasts of the area.

The mainland urban area is built on a volcanic field and includes highly urbanised areas, local and regional parks, and a significant rural landscape used for agriculture and primary industry.

Numerous north-facing slopes and coastal areas contain highly flammable vegetation and can be subject to extreme weather conditions.

The landscape includes many steep slopes, created through volcanic eruption and lava flow. These can be found in both the rural and urban areas, many of which are highly populated due to settlement patterns. Fire has a preheating effect on slopes; in general, for every 10 degrees of uphill slope, the speed of fire doubles.

The Hauraki Gulf Islands/ Tīkapa Moana/ Te Moana Nui o Toi fall within the area and include over 50 islands. Although some islands are populated, many of the communities are isolated and difficult to access, set amongst highly flammable vegetation such as mānuka and kānuka.

Tāmaki Makaurau has substantial natural, historic and cultural areas of significance that are vulnerable to fire.

Tāmaki Makaurau has 28 regional parks, over 3,000 local parks, and 241 sports parks.

The Tāmaki Makaurau islands and large coastline make it a prime area for seabird breeding and much of the city's ocean areas are classified as 'Important Bird Areas'.

The risk of fire starting or fire spreading in open space, forested areas or across the coastline is increasing due to environmental change, urban development, and human behaviour.

Fire and Emergency's ability to stop a fire in open space, particularly some of the larger parks or reserves, is impacted by the accessibility of some locations, topography and vegetation type.

The city has 2,494 protected historic heritage places, 17 historic areas, plus scientific reserves.

Eighteen percent of protected heritage places relate to Māori-origin archaeology. There are over 10,000 identified archaeological sites located across natural and built environments, including the islands. Many archaeological sites are not easily identifiable and are vulnerable to fire, fire mitigation measures, and fire suppression activity.

Sixty-eight percent of Tāmaki Makaurau heritage buildings were built between 1898s and 1920s¹. Many of the city's historic buildings are wooden structures, making them particularly susceptible to fire.

¹ Auckland's Heritage Counts 2019 Annual Summary

Demographics

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

Density, diversity of living, and high visitor numbers contribute to fire risk.

Tāmaki Makaurau has the largest residential population in New Zealand and the highest number of domestic and international tourists. In 2018, 1,571,718 people inhabited Tāmaki Makaurau and over 2.5 million people travelled through the international airport.

With the population growing at approximately 11 percent per annum, by 2043 over 2.2 million people are expected to live in Tāmaki Makaurau, an increase of more than 30 percent from 2018. The growth in the area is accommodated through increased density in urban centres and expansion into lifestyle properties in the higher risk urban-rural interface greenfield sites.

In the 2018 census, Tāmaki Makaurau had a total of 498,789 occupied private dwellings, an increase of 26,745, or 5.7 percent from 2013.

As the city grows, the risk of unwanted fire or fire spreading increases. Human behaviour, including recreational fires, cooking fires, fireworks, and the burning of garbage or vegetation contribute to this risk.

The urbanisation of rural-urban interface areas or areas close to high vegetative areas such as forests or regional parks increases the potential for wildfires as more people live and participate in recreational activities in these parts, increasing the potential for unwanted fire and fire spread.

The transport network through the area is a combination of roading, ferries and rail. Urban sprawl, increasing congestion on the motorways, and single points of entry to some peninsulas mean that access or evacuation can be slow should a fire occur.

Residents across Tāmaki Makaurau are serviced through a combination of reticulated water or un-reticulated water, such as tank water in more rural locations. The lack of reticulated water in some areas heightens the risk that fires may be difficult to extinguish, particularly during the drier summer months when water levels of streams, tanks and other water supplies may be low. A map showing locations with reticulated water supply is included as [Appendix 1](#).

Tāmaki Makaurau is the fourth most diverse city in the world.

There are approximately 179 ethnicities represented and 167 languages spoken across the city and over 40 percent were born overseas.

The Māori population has grown more rapidly than the wider Tāmaki Makaurau population.

At the 2018 census, there were 181,194 usual residents in Tāmaki Makaurau who identified as Māori (11.5 percent of the Tāmaki Makaurau population). This is an increase of 38,430 people, or 26.9 percent, since the 2013 Census.

The European population has grown more slowly than the wider Tāmaki Makaurau population.

At the 2018 Census there were 841,383 usual residents in Tāmaki Makaurau who identified with a European ethnicity (53.5 percent of the Tāmaki Makaurau population). This is an increase of 52,092 people, or 6.6 percent, since the 2013 Census.

In Tāmaki Makaurau, the Asian population was the highest growing.

Since the 2013 Census, this ethnic group has increased by 135,444 people, or 44.1 percent. Over two thirds of New Zealand’s Chinese, Indian and Korean populations live in Tāmaki Makaurau. Over a third (36.0 percent) of the Tāmaki Makaurau Asian population identified as Chinese and 32.3 percent as Indian. A smaller proportion (7.4 percent) identified as Filipino and a further 5.7 percent as Korean.

Almost two thirds (63.9 percent) of New Zealand’s Pacific populations live in Tāmaki Makaurau.

The Pacific population has grown more rapidly than the wider Tāmaki Makaurau population. 243,978 usual residents in Tāmaki Makaurau who identified with a Pacific ethnicity (15.5 percent of the Tāmaki Makaurau population). This is an increase of 49,032 people, or 25.1 percent, since the 2013 Census.

Pacific peoples in Tāmaki Makaurau are diverse. Those who identify as Samoan account for 48.6 percent of Pacific peoples in Tāmaki Makaurau. Those who identify as Tongan (25.6 percent) and Cook Island Māori (19.1 percent) are also large groups.

While many residents can speak or understand English, in some parts of Tāmaki Makaurau non-English speakers make up almost 20 percent of the population base. This has the potential to increase risk through lack of understanding of fire hazards, seasonal fire risks, fire regulation or changes to fire controls.

The people of Tāmaki Makaurau are diverse in age, lifestyle, culture and community.

The diverse culture, high level of tourism, infrastructure and landscape of Tāmaki Makaurau lends itself to numerous events, cultural celebrations and festivals. While this adds vibrancy to the city, events can heighten the risk of unwanted fire in public spaces or regional parks, especially where fire, fireworks or pyrotechnics are used.

The diversity of the population presents different cultural norms in the use of fire, and different levels of vulnerability to hazards or the risk of fire.

Children and young people make up one-third of the population. Tāmaki Makaurau also has several major tertiary institutions and numerous private learning providers, which attract students from across the country and internationally. This group is likely to have low awareness of rules relating to fire, particularly in open spaces.

People over 65 years make up 12 percent of the population with some pockets of the area aging. Many older people may live alone and/or with limited mobility, increasing their vulnerability when evacuating due to a fire.

One in five inhabitants of Tāmaki Makaurau was identified as disabled in the 2013 Disability survey (Statistics New Zealand).

Those with limited mobility, impaired hearing or vision, are more vulnerable to the risks of fire, particularly those who live in rural or isolated areas.

Deprivation Index

The Deprivation Index is a measure of socio-economic status, encompassing access to communication, income, employment, qualifications, home ownership, living support for older people, living space, and living conditions. Areas are given a score from 1 to 10, with 1 representing communities that experience the least deprivation, and 10 representing the communities that experience the most deprivation. The New Zealand average is 5.5.

There are polarising levels of deprivation across the area. This means that some residents may be sleeping rough, in crowded residence, or unsuitable accommodation. Outdoor fires or unconventional heating sources may be used, heightening the risk of unwanted fire.

It is important to consider groups of people who may be more at risk in the event of a fire. Considering this information, we take a targeted approach for at-risk groups with regard to fire risk reduction, e.g., planned Home Fire Safety Visits to isolated lower socioeconomic communities, and promotion of our Get Firewise programmes.

	Tāmaki Makaurau	Rural zone	Urban zone	Islands zone
Population	1,575,810	146,543	1,419,169	10,098
Deprivation Index	5.4	3.7	5.5	4.6
European (NZ)	54.2%	81.3%	52.7%	89.5%
Māori	11.5%	11.7%	11.5%	12.1%
Pacific peoples	15.5%	5.2%	16.0%	3.7%
Asian	28.1%	12.0%	29.1%	3.7%
Middle Eastern, Latin American, African	2.3%	1.0%	2.3%	3.2%
Other ethnicity	1.5%	1.5%	1.5%	1.4%
Age 0 to 14	20.0%	19.6%	20.0%	15.5%
Age 15 to 29	22.7%	17.9%	23.0%	13.7%
Age 30 to 64	45.2%	48.4%	45.1%	49.3%
Age 65+	12.0%	14.1%	11.9%	21.2%

- Data is from Census 2018
- Persons may identify as more than one ethnicity

Zones

Because of the different fire risk conditions that exist in different parts of the fire plan area, the area is divided into a number of different fire season zones to allow for appropriate fire control measures to be applied locally. Department of Conservation or public conservation land is identified within each zone.

We recognise that there are different associated risks within each zone. But the three zones allow consistent application of fire control measures over the surrounding land types and uses:

- [Rural zone](#), this includes:
 - Forestry
 - Department of Conservation (DOC) lands
 - Urban-rural interface
 - Mainland rural
 - Open space park
 - Whenuapai

- [Mainland urban zone](#)
- [Islands zone](#), including:
 - Conservation islands (including all DOC islands)
 - Populated islands

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

Intertidal areas come under the rules of the adjoining zone.

Frequency of elevated fire danger

On average, this area experiences:

Fire danger	
Forest fire danger	5–7 days of extreme fire danger 15–20 days of very high fire danger
Grass fire danger	1 day of extreme fire danger 5–10 days of very high fire danger
Scrub fire danger	150–200 days of extreme fire danger 50–70 days of very high fire danger

These figures are based on the data from the Remote Automated Weather Stations (RAWS) across Tāmaki Makaurau.

Fire history

The known fire history for this area includes fires over 50 ha or significant economic or biodiversity impact:

Year	Fire	Cause
2021	Duder Regional Park	Campfire
2021	Greenhithe Local Park (5 ha)	Mowing
2020	Simon Bayer Road, Puhoi – Private/Forestry	Hot works using a grinder
2020	Waitawa Regional Park	Campfire
2020	Ness Valley Road – Forestry	Forestry burn
2019	Māngere Mountain (4 ha)	Fireworks
2019	Maungarei/Mt Wellington (2 ha)	Fireworks
2019	International Convention Centre, 87-93 Wellesley Street West, Auckland Central	Accidental ignition (combustible material)
2017	Cornwallis Regional Park	Suspicious
2015	Browns Island	Campfire/bonfire
2015	Weiti Forest	Mulching machine
2014	Cornwallis – Regional Park/Private	Cooking fire
2013	Tapora – Public conservation land/Private	Campfire
2013	Wright Road – Forestry	Firing tracer rounds
2013	Aotea (Great Barrier) Island	Cooking fire
2012	Waitawa Regional Park	Campfire

Wildfire threat analysis

One of the tools that we use to set our zones for fire control is the information gained from wildfire threat analysis, which is defined as:

A systematic method of identifying the level of threat a particular area faces from wildfire. The level of threat is generally related to a combination of ignition potential, potential fire behaviour and the values threatened. These factors may themselves be derived from other combinations of factors, for instance, potential fire behaviour can be determined from a combination of climate, topography and fuels.

In wildfire threat analysis, ignition potential is described as RISK, potential fire behaviour is described as HAZARD (not to be confused with fire hazards in our regulatory context), and values threatened is described as VALUES.

The approach taken has been to treat Wildfire Threat Analysis as a GIS-based spatial analysis project. The large number of factors (or layers) makes the manual overlaying of maps impractical. Geographic Information Systems (GIS) have been purposefully built to process multiple overlays of this nature. This involves the combination of a number of overlays and the scoring, weighting and subsequent accumulation of factors that contribute to risk (ignition potential), hazard (potential fire behaviour) and values, and as a result, to overall threat.

The results of a Wildfire Threat Analysis have multiple uses for fire management activities within the fire area identifying the higher risk areas to allow the appropriate fire controls on those areas of land or types of activities.

Reducing the risk in Tāmaki Makaurau

The approach to reduce the risk of fire within Tāmaki Makaurau is to focus on the identification and evaluation of the main risk triggers. This input leads to a mitigation action plan, concentrating on increasing community awareness. The actions to enhance the safety advice provided to the public and improve engagement include the following:

- Social Media:
 - Support of national campaigns (e.g., smoke alarm)
 - Fire season campaigns (e.g., fire permits, fire season half grapefruit boards)
 - Engagement campaigns (e.g., special events post: open day, firefighter profile, International Firefighters Day)
 - Fire safety advice campaigns (e.g., extreme weather conditions, rural fire safety, incidents outcome)
- Signage for target markets in public places (e.g., petrol stations, community boards, fishing bait freezer lids)
- Updating roadside signage to show the current fire season
- Evaluating and assessing fire hazards
- Educational visits and letters post fires
- Media releases in a variety of languages
- Working with the leadership of ethnic community networks
- Advice and educational letters for the reduction of fire hazards
- Liaising with stakeholder for the development of fire prevention material
- Issuing fire permits based on fire season
- Joint letter box mailbox drops around each of the maunga/mountains before the fire season
- Joint fire safety advice with Auckland Regional Parks to high risk properties

- Advertisements to target public risk areas (e.g., Franklin Planner)
- Initiating prohibited or restricted fire seasons
- Fire and Emergency representatives attending community events such as rural showdays and local school galas, festivals, etc.

Council bylaws, regional plans, legal covenants or restrictions

Entity	Bylaw/Plan/ Legislation	Function
Auckland Council	Auckland Unitary Plan Section 14 (Air Quality)	<ul style="list-style-type: none"> • Outdoor burning rules to maintain and enhance air quality. • Smoke nuisance and risk. • Restricts fireworks on private property.
	Auckland Unitary Plan Section 36 Hazards and Flooding	<ul style="list-style-type: none"> • Ensures that plan provisions for subdivision and vegetation management take into account wildfire hazards.
	Te Ture ā-Rohe Marutau ā-Iwi me te Whakapōrearea 2013 Public Safety and Nuisance Bylaw 2013	<ul style="list-style-type: none"> • Restricts use of fireworks in public places to protect public safety and prevent nuisance. • Restricts lighting of fires in public places and cooking fires in council-controlled public places. <p>(This bylaw supports implementation of the Regional Parks Management Plan 2010 which limits open fires, including portable cookers, to designated areas to minimise public safety risk and damage.)</p>
	Regional Parks Management Plan 2022	<ul style="list-style-type: none"> • Only permits the public use of open fires, including portable barbecues using solid fuels, in designated areas. • Prohibits smoking in regional parks. • Prohibits fireworks in regional parks. • Sets structure for vegetation management and risk reduction to prevent unwanted fire or fire spreading.
	Ture ā-Rohe Mahi Urungi Āhuru 2021 Navigation Bylaw 2021	<ul style="list-style-type: none"> • The Navigation Safety Bylaw addresses vessel operations in relation to hot works that are carried out on vessels and carriage of fuel oil/bunkering operations. These activities can create a fire risk and could be considered relevant references for inclusion in the plan.
Auckland Transport	Public Safety and Nuisance Bylaw 2013	<ul style="list-style-type: none"> • Restricts use of fireworks in public places to ensure public safety and prevent nuisance. • Restricts lighting of fires in public places and cooking fires in council-controlled public places. • (This bylaw supports implementation of the Regional Parks Management Plan 2010 which limits open fires, including portable cookers, to designated areas to minimise public safety risk and damage.)
	Auckland: Conservation management strategies	Describes conservation values present in Auckland and provides guidance for DOC's work in the form of a vision, objectives, outcomes for Places, policies, and milestones; translating DOC's strategic outcomes to Auckland.

Entity	Bylaw/Plan/ Legislation	Function
Department of Conservation Te Papa Atawhai	Hauraki Gulf Maritime Park Bylaws	<ul style="list-style-type: none"> Only permits the public use of open fires, including portable barbecues using solid fuels, in designated areas.
	Civil Defence Emergency Management Act 2002	<ul style="list-style-type: none"> The Civil Defence Emergency Management Act 2002 creates a framework within which New Zealand can prepare for, deal with, and recover from local, regional and national emergencies.
Auckland Emergency Management	Auckland Civil Defence and Emergency Management (CDEM) Group Plan 2024-2029 (the Group Plan)	<ul style="list-style-type: none"> The Group Plan presents the vision and goals of the Auckland CDEM Group for this period, how Auckland will achieve this vision, and a framework for measuring progress. It is designed to be the five-year strategic plan for the Auckland CDEM Group, key partners and stakeholders involved in CDEM functions, as well as the public within the Auckland region.

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. Note: not all or any inputs are guaranteed to be used. Fire and Emergency New Zealand reserves the right to determine the best outcome for all communities.
Public consultation	You will have the opportunity to comment during the 4-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.
Notify via normal channels	This is relationship based, at either national or local level where existing relationships and engagement arrangements are used.

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	Fire season changes Restricted or prohibited. Moving to, or revoking	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
New Zealand Defence Force	Consulted while creating plan	Consult while amending plan	Consult during decision making	Consult during decision making	Consult during decision making

Stakeholder	Fire plan development	Fire plan amendment	Fire season changes Restricted or prohibited. Moving to, or revoking	Section 52 fire prohibitions	Section 52 restrictions/ prohibitions on activities
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
Toitū Te Whenua – 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 Government Professionals Aotearoa (formerly Society of Local Government Managers (SOLGM))	Consulted while creating plan	Consult while amending plan	Notify using public channels	Notify using public channels	Notify using public channels
Local Government New Zealand (LGNZ)	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: <ul style="list-style-type: none"> Te Uru Rākau 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

Stakeholder	Fire plan development	Fire plan amendment	Fire season changes Restricted or prohibited. Moving to, or revoking	Section 52 fire prohibitions	Section 52 restrictions/ prohibitions on activities
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
Nga Pirihimana O Aotearoa 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. Fire and Emergency undertakes to consult as indicated for each zone's stakeholders.

Stakeholder	Fire plan development	Fire plan amendment	Fire season changes Restricted or prohibited. Moving to, or revoking	Section 52 fire prohibitions	Section 52 restrictions/ prohibitions on activities
Ardmore Airport	Consulted while creating plan	Public consultation	Consult during decision making and notify of decision	Consult during decision making and notify of decision	Notify via public channels
Auckland Council (including Local Boards)	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Auckland International Airport Ltd	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Auckland Transport	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Department of Conservation	Consulted while creating plan	Public consultation	Consult during decision making and notify of decision	Consult during decision making and notify of decision	Notify via public channels
Department of Corrections	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Federated Farmers of New Zealand	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Hancock Forest Management	Consulted while creating plan	Public consultation	Consult during decision making and notify of decision	Consult during decision making and notify of decision	Consult with if activity type affects operations
KiwiRail	Public consultation	Public consultation	Notify via public channels	Notify via public channels	Consult with if activity type affects operations

Stakeholder	Fire plan development	Fire plan amendment	Fire season changes Restricted or prohibited. Moving to, or revoking	Section 52 fire prohibitions	Section 52 restrictions/ prohibitions on activities
LSB Ltd	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Ministry of Primary Industries	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Nga Pirihi Mana O Aotearoa New Zealand Police	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Waka Kotahi New Zealand Transport Agency	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Consult with if activity type affects operations
North Shore Airport	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Northland Rural Support Trust	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
NZ Defence Force	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Property owners	Public consultation	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Public	Public consultation	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Hato Hone St John	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Waikato Rural Support Trust	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels

Stakeholder	Fire plan development	Fire plan amendment	Fire season changes Restricted or prohibited. Moving to, or revoking	Section 52 fire prohibitions	Section 52 restrictions/ prohibitions on activities
Watercare Services Ltd	Consulted while creating plan	Public consultation	Notify via public channels	Consult with if activity type affects operations	Consult with if activity type affects operations
Independent Māori Statutory Board	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Ngāti Manuhiri	Public consultation	Public consultation	Consult during decision making and notify of decision	Consult during decision making and notify of decision	Notify via public channels
Ngātiwai Trust	Public consultation	Public consultation	Consult during decision making and notify of decision	Consult during decision making and notify of decision	Notify via public channels
Tūpuna Maunga Authority	Public consultation	Public consultation	Consult during decision making and notify of decision	Consult during decision making and notify of decision	Consult with if activity type affects operations
Te Kawerau a Maki	Public consultation	Public consultation	Consult during decision making and notify of decision	Consult during decision making and notify of decision	Notify via public channels
Te Runanga o Ngāti Whātua	Public consultation	Public consultation	Consult during decision making and notify of decision	Consult during decision making and notify of decision	Notify via public channels
Te Uri o Hau	Public consultation	Public consultation	Consult during decision making and notify of decision	Consult during decision making and notify of decision	Notify via public channels
Ngāti Rehua - Ngātiwai Ki Aotea Trust	Public consultation	Public consultation	Consult during decision making and notify of decision	Consult during decision making and notify of decision	Notify via public channels

Stakeholder	Fire plan development	Fire plan amendment	Fire season changes Restricted or prohibited. Moving to, or revoking	Section 52 fire prohibitions	Section 52 restrictions/ prohibitions on activities
Ngāti Te Ata Waiohū	Public consultation	Public consultation	Consult during decision making and notify of decision	Consult during decision making and notify of decision	Notify via public channels
Ngāti Whātua o Kaipara	Public consultation	Public consultation	Consult during decision making and notify of decision	Consult during decision making and notify of decision	Notify via public channels
Ngāti Whātua o Ōrākei	Public consultation	Public consultation	Consult during decision making and notify of decision	Consult during decision making and notify of decision	Notify via public channels
Te Ahiwaru Waiohū	Public consultation	Public consultation	Consult during decision making and notify of decision	Consult during decision making and notify of decision	Notify via public channels
Te Ākitai Waiohū Iwi Authority	Public consultation	Public consultation	Consult during decision making and notify of decision	Consult during decision making and notify of decision	Notify via public channels
Ngāti Paoa Trust Board	Public consultation	Public consultation	Consult during decision making and notify of decision	Consult during decision making and notify of decision	Notify via public channels
Ngāti Tamaoho Trust	Public consultation	Public consultation	Consult during decision making and notify of decision	Consult during decision making and notify of decision	Notify via public channels
Te Patukirikiri Iwi Trust	Public consultation	Public consultation	Consult during decision making and notify of decision	Consult during decision making and notify of decision	Notify via public channels
Waikato-Tainui	Public consultation	Public consultation	Consult during decision making and notify of decision	Consult during decision making and notify of decision	Notify via public channels
Ngāi Tai ki Tāmaki	Public consultation	Public consultation	Consult during decision making and notify of decision	Consult during decision making and notify of decision	Notify via public channels

Stakeholder	Fire plan development	Fire plan amendment	Fire season changes Restricted or prohibited. Moving to, or revoking	Section 52 fire prohibitions	Section 52 restrictions/ prohibitions on activities
Ngāti Tamaterā	Public consultation	Public consultation	Consult during decision making and notify of decision	Consult during decision making and notify of decision	Notify via public channels
Ngāti Maru Runanga Trust	Public consultation	Public consultation	Consult during decision making and notify of decision	Consult during decision making and notify of decision	Notify via public channels
Ngāti Whanaunga Incorporated Society	Public consultation	Public consultation	Consult during decision making and notify of decision	Consult during decision making and notify of decision	Notify via public channels
Te Kupenga o Ngāti Hako Inc	Public consultation	Public consultation	Consult during decision making and notify of decision	Consult during decision making and notify of decision	Notify via public channels

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

Zone information

Rural zone

Geography

The zone covers the rural areas to the north, west and south of the central city, excluding the islands of the Hauraki Gulf. The northern rural area across Tāmaki Makaurau- Auckland makes up over 46 percent of the land cover, spanning both the north-eastern and western coast.

The three primary rural areas within the north and west of Tāmaki Makaurau are Wellsford, Warkworth, and Kumeū. Within these areas are local towns:

- Helensville
- Riverhead
- Kumeū
- Wellsford
- Warkworth
- Matakana

Further rural and coastal settlements are distributed across the area.

The southern rural area spans south from the Manukau Harbour in the west to the Hauraki Gulf in the east. Predominately the Franklin area, this includes the townships of:

- Beachlands
- Maraetai
- Pukekohe
- Waiuku

New urban area communities will be established in Drury and Dairy Flat over the next five years, including land set aside for commercial, light and heavy industrial uses.

The north and western area has a number of portions identified as 'Future Urban' primarily at Warkworth and Kumeū-Huapai with rural development expected at Wellsford and Helensville.

Significant development is expected within the southern area in Paerata, Drury West, and Pukekohe.

The northern and southern zones are dissected by state highways and are serviced through major motorway networks, local transport links, and dispersed private roading.

Demographics

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

Population

- The northern rural area of Rodney represents 4.2 percent of the population across Tāmaki Makaurau, up slightly from 3.9 percent at the 2013 Census. In 2018 the population was 66,417 and is projected to grow to 123,800 by 2043.
- The southern rural area of Franklin represents 4.8 percent of the population across Tāmaki Makaurau, up slightly from 4.6 percent at the 2013 Census. In 2018 the population was 74,838 people and is projected to grow to 146,900 by 2043.

Although at opposite ends of Tāmaki Makaurau, demographics across the rural areas are similar.

The predominant population group is New Zealand European.

The population bases are relatively stable with an average 40 percent of residents having resided in the areas for 20 years.

There are lower levels of new residents, compared to the Tāmaki Makaurau average, with approximately 15 percent of residents across the rural areas arrived from overseas in the last four years.

There are higher levels of English speakers than the Tāmaki Makaurau average, with only one percent of the population base that does not speak English.

The southern rural area has a higher percentage of the population who identify as Māori (15 percent) than the Tāmaki Makaurau average. While the northern rural area has a population of 11.5 percent that identify as Māori, this is an increase of nearly 50 percent from 2013.

Both rural areas have a significant older population. In the rural north 17 percent and 15 percent of the southern rural population is over 65 years.

Home and living

Overcrowded residences are lower in the rural areas than urban areas, at 6 and 7 percent respectively for the north and southern areas.

The northern rural area has very few residents identified in deprivation with only 2 percent rating 9 or 10 on the Deprivation Index. Deprivation is higher in the southern rural area with 9 percent of residents rating 9 or 10 on the Deprivation Index.

Climate/weather

Tāmaki Makaurau experiences a subtropical climate. The region lies at 36°S and 175°E. Summers tend to be warm and humid while winters are relatively mild, and many parts of the region only receive a few frosts each year.

The average annual rainfall across Tāmaki Makaurau is 1115 mm and an average annual temperature of 15.5°C. The influence of the coastal environment and the ranges to the west and south often generate sporadic very heavy falls. Dry spells may occur during the summer months, but they are usually not long-lived. These dry spells influence decisions around changing fire seasons to and from Restricted and Prohibited seasons.

Most parts of Tāmaki Makaurau receive around 2000 hours of bright sunshine per year. Occasionally Tāmaki Makaurau experiences extreme events that cause

flooding and wind damage, although these events are generally not as severe as in other regions.

National Institute of Water and Atmospheric Research (NIWA)'s *Auckland region climate change projections and impacts* (Pearce et al., 2018) provides Tāmaki Makaurau with the most robust information on the climate projections for the region. This research underpins the National Climate Change Risk Assessment. These assessments help determine where the future risk lies and what types of mitigation and education are required.

Climate change predictions based on the reports show increasing annual average and extreme temperatures and significantly more hot days each year.

Seasonal distribution of rainfall is projected to change with wetter autumns and drier springs. More extreme rainfall events are expected to increase while the number of rain days and soil moisture deficit are set to decline.

Drier conditions and prolonged drought increase the fire hazard in forests or heavier fuels, whereas the finer fuels such as scrubland and grasslands can dry out within a matter of days. If there is a lot of dry fuel available, the fire will burn more intensely, causing it to spread faster. Fire typically travels faster in finer fuels than forest fuels due to the amount of material available and the rate of those materials igniting. Strong winds, high temperatures, low humidity, and seasonal drought can combine to produce dangerous fire weather situations. This was seen in the 1998/99, 2012/2013, 2019/2020, 2020/2021 and 2021/2022 fire seasons where there were significantly more extreme and high fire danger days.

Tāmaki Makaurau predominantly experiences south-westerly winds, however, during the summer period, the area is affected by northerly to northeast wind directions. Wind is the most unpredictable factor, supplying the fire with additional oxygen and further drying out potential fuel. It also pushes the fire across the land at a faster rate. Within reason, the steeper an uphill slope the more preheating of fuels accelerates, increasing rates of fire spread. Not only does the steep terrain increase the speed of wildfire, but it also makes it extremely difficult to contain the fire through direct attack.

The current climate summaries from NIWA have shown that the last three years have experienced very warm fire seasons. With 2023 being New Zealand's second warmest year on record, 2019 recorded as the fourth and 2018 being New Zealand's second-equal warmest year on record. This has resulted in significantly reduced soil moisture and higher temperatures across the zones.

The weather patterns are associated with the marine type of climate with usually higher than average relative humidity and predominately west to south-west breezes.

Auckland region climate change projections and impacts (Pearce et al., 2018)

Land cover/ land use

Based on the land cover database, the predominant fuel type in rural areas is high producing grasslands, at 51 percent. In general, the grasslands of Tāmaki Makaurau are grazed throughout summer and pose a low threat of wildfire. However, 15 percent of the total of grasslands are un-grazed and create the opposite effect, resulting in elevated highly flammable fuel, which is extremely dangerous in high wind environments, especially on the coastal areas of the zone.

Approximately 60 percent of the Rodney district in northern Tāmaki Makaurau is rural. This district has the largest plantation of forestry in Tāmaki Makaurau, at around 38,500 hectares.

Remaining native vegetation is fragmented, although there are sizeable areas of logged native forest at Moirs Hill, Dome Valley, Omaha, Mount Auckland, Makarau and extensive areas of native scrub at the South Head of Kaipara Harbour.

The Franklin area in southern Tāmaki Makaurau is 70 percent farmland. Native forest and scrub cover around 15 percent of the area with the vast majority of this contained in the Hunua Ranges.

Most of the Āwhitu Peninsula is farmed, with exotic forestry and iron sand extraction for steel production at the southern end of the peninsula.

The vegetation varies considerably with areas of comparatively volatile fuel species, forest and developing areas of regenerating scrubland. There are also areas of coastal village development, many of which in scrubland.

Across the region, the rural urban interface with small urban-styled subdivisions, lifestyle blocks, small rural communities and villages create several challenges when mitigating the threats and risks associated with rural fire.

Examples of social and economic losses include damage to properties, infrastructure, biodiversity and exotic forests.

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
Roading network <ul style="list-style-type: none"> Sparks from vehicle malfunction, discarded cigarettes Spark causing activities during road maintenance and mowing 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Railway line <ul style="list-style-type: none"> Sparks from passing trains and during track maintenance 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Fuel and natural gas distribution networks <ul style="list-style-type: none"> Gas leaks Protected by own controls on use of fire and other activities in vicinity 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Water – Supply catchment areas, dams, reservoirs, treatment plants <ul style="list-style-type: none"> Protect by applying controls to surrounding areas 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Electricity transmission lines <ul style="list-style-type: none"> Sparking during high winds 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

<ul style="list-style-type: none"> • Use of auto-reclosers limited in high fire danger • Recommended vegetation mitigation practices 			
Telecommunications network and towers <ul style="list-style-type: none"> • Protect by applying controls to surrounding areas 	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Transport

In the northern rural area, SH1 between Puhoi and Warkworth, is a key transport link. It connects the north to the North Island freight triangle of Tāmaki Makaurau, Waikato and Tauranga, and facilitates the movement of goods and people.

Across the southern rural area, there are 951 km of rural roads and 297 km of urban roads, making up 16 percent of the roading network within Tāmaki Makaurau.

Improvements to SH1 North and South plus the start of electrification of rail to Pukekohe with new stations at Drury will greatly enhance transport infrastructure.

Rail freight run up from the rural though connecting Hamilton and Tauranga to Tāmaki Makaurau. This line runs through the city up to the rural north.

Fuel and gas

A fuel and gas pipeline runs from Whangārei down through Rodney, and services the communities and transport infrastructure of Tāmaki Makaurau. It continues through to the southern rural area. Major fuel storage is located in the southern urban area of Auckland.

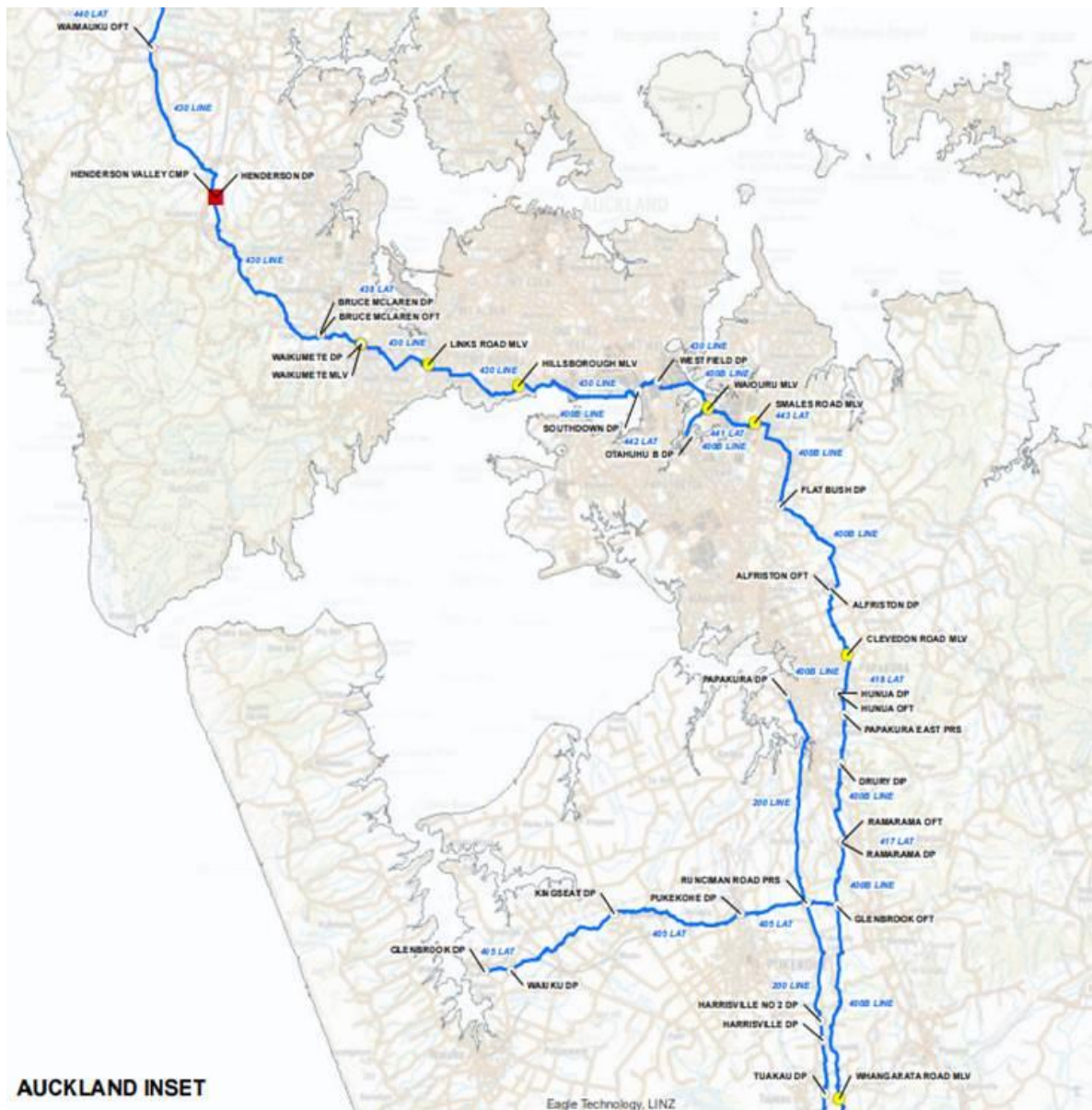


Image by Eagle Technology LINZ

Water infrastructure

There are water reservoirs and treatment plants in the rural north and south. The rural south holds 60 percent of water supply for Tāmaki Makaurau.

Water catchment land is an important asset to Aucklanders and would be severely impacted if an extended wildfire incident occurs within this landscape. The areas comprising the water catchment lands are mainly in public ownership surrounding municipal water supply infrastructure. These include five dams in the Waitākere Ranges, four dams in the Hunua Ranges, two dams in Helensville, and the Hays Creek Dam in the Hūnua Gorge.

Electrical

Electrical plants are also located in the south and power transmission lines across the fire plan area.

Recreational locations

- Regional parks
- Local parks
- Beaches
- Art walks
- Forestry with high recreation activity

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 due to a restriction on activities can have significant economic impact.

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

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
Marae – hāngī and other cultural fires	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Agricultural events and markets <ul style="list-style-type: none"> • Use of machinery - sparks 	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Festivals, particularly held over multiple days with camping <ul style="list-style-type: none"> • Campfires • Increase in people without knowledge of fire risk or rules 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Fireworks <ul style="list-style-type: none"> • Use may be prohibited during high fire danger. Prohibited under s52 in some locations • Pyrotechnics managed by other approvals 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Horse riding, mountain biking <ul style="list-style-type: none"> • Access restricted during high fire danger 	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Motorsports, e.g., rally, 4WD and dirt biking	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

<ul style="list-style-type: none"> High temperature operating parts and sparks from vehicles 			
Hunting, camping, hiking or tramping <ul style="list-style-type: none"> Campfires Access restricted during high fire danger 	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Beach fires <ul style="list-style-type: none"> Campfires Ecological values at risk 	<input checked="" 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
Pakiri – dune land vegetation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Kaipara South Head Peninsula – dune land vegetation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Kaipara Harbour – estuarine habitat	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Hunua Ranges and Waitākere Ranges – native forest and shrubland, rare and endangered flora and fauna	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Āwhitu Peninsula – freshwater wetlands, dune lakes, threatened ecosystems	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Water – supply catchment areas within the Hūnua and Waitākere Ranges	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Regenerating dunes	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Ātiu Creek Regional Park protects 850 hectares of rolling to steep hill-country which sits behind more than 10 km of highly indented and varied coastline along the Ōruawharo arm of the Kaipara Harbour.

In the southern rural area are the Hunua Ranges, which contain a 20,000 hectare area of native forest and shrubland. This area is the largest area of kauri-hard beech forest in the Tāmaki Makaurau region which is free of kauri dieback. The Hunua Ranges contain important habitats for a number of rare and endangered flora and fauna, including the long-tailed bat, Hochstetter's frog, kākā, and toropapa. The ranges are also home to the only naturally occurring population of kōkako in mainland Tāmaki Makaurau.

The Waitākere Ranges and their foothills and coasts comprise an area of some 17,000 hectares of public and private land located between metropolitan Auckland and the west coast of the former Waitākere City and Rodney District. The area is of

local, regional, and national significance and includes 250 km of walking track, including the Hillary Trail challenge. The Ranges also include the Ark in the Park open sanctuary at Cascades Kauri Park, which features an intact forest remnant and is home to iconic species such as the Hochstetter’s frog and long-tailed bat (pekapeka). Kōkako were introduced in 2009.

The Waitākere Ranges Heritage Act 2008 recognises the national, regional, and local significance of the Ranges and promotes the protection and enhancement of heritage features for present and future generations. The Ranges contain several small community settlements such as Piha, Karekare, Huia and Waitatarua along with isolated beach locations.

DOC land managed by Regional Parks is included is the Hūnua and Waitākere Ranges.

Kaipara South Head has some of the most intact dune land and shrubland sequences in the North Island. Along with Pakiri, it is home to the critically endangered fairy tern.

Additional to the ranges is the Āwhitu Peninsula. Despite the significant modifications made by humans, Āwhitu still retains numerous freshwater wetlands and dune lakes, which support a number of threatened bird species such as banded rail and North Island fernbird.

There are 594 historic places located in rural areas across Rodney and Franklin. The historic place's locations are considered when deciding to apply restrictions to a fire zone.

Other areas with higher risk

- Steep coastal terrain with dry vegetation and high wind speeds
- Urban-rural interface areas with lifestyle blocks and subdivision boundaries
- Larger tracts of coastal vegetation with high recreation activity

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:

Fire danger	
Forest fire danger	5–7 days of extreme fire danger 15–20 days of very high fire danger
Grass fire danger	1 day of extreme fire danger 5–10 days of very high fire danger
Scrub fire danger	150–200 days of extreme fire danger 50–70 days of very high fire danger

Fire and Emergency will discuss with major forest owners around options for restricting or imposing additional conditions on forest access when the fire danger increases. This could impact forestry operations or the reduction of activities within the forests.

Fire and Emergency will continue discussions with the forest owners, Auckland Council, and Auckland Transport regarding public access ways and roads through exotic forest plantations and other areas of risk. Recent examples have included the Muriwai Coast Road and Wilson Road in the 2020/2021 fire season.

Fire history

The known fire history for this zone includes fires over 50 ha or significant economic or biodiversity impact. These have occurred mainly in coastal areas.

Significant wildfires or fires caused by activities regulated by our fire control powers includes:

Year	Fire	Cause
2021	Duder Regional Park	Campfire
2020	Simon Bayer Road, Puhoi – Private/Forestry	Hot works using a grinder
2020	Waitawa Regional Park	Campfire
2020	Ness Valley Road - Forestry	Forestry burn
2017	Cornwallis Regional Park	Suspicious
2015	Weiti Forest fire	Mulching machine
2014	Cornwallis – Regional Park/Private	Cooking fire
2013	Tapora – public conservation land/Private	Campfire
2013	Wright Road – Forestry	Firing tracer rounds
2012	Waitawa Regional Park	Campfire

Predominant fuel type

The predominant fuel type in this zone is grassland but it has significant forestry areas and scrubland close to the coastal area.

Thresholds**Fire seasons**

Build-up Index (BUI) is the most relevant fire weather index to use as a threshold for fire season management in this zone.

Build Up Index (BUI)		
0–45	40–85	> 80
Open	Restricted	Prohibited

The thresholds have overlapping trigger points when changing seasons, to allow Fire and Emergency to engage with our partners and stakeholders early if some parts of the zone increase in fire danger earlier than others. Areas within the zone that increase earlier are, but are not limited to, the coastal areas of the west and east coast.

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)

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Forestry operations and access

Fire and Emergency will discuss with major forest owners around options for restricting or imposing additional conditions on forest access when the BUI reaches 80 for forest dune or peat areas or 90 for clay-based areas. Restrictions on high-risk activities will be imposed ahead of complete access exclusion.

When the average BUI reaches the above triggers, Fire and Emergency will discuss with the forest owners and Auckland Transport about public access ways and roads through exotic forest plantations and other areas of risk. This includes reduced recreational activity, closed public access then imposed restrictions on operations, in that order

Roadside mowing

Work with Council, Waka Kotahi NZ Transport Agency, AIMs, and KiwiRail around the scheduling of property, road and rail corridor vegetation management.

Mowing, ploughing or harrowing fields

There are no arrangements to limit this type of activity in place currently. It is recommended that when grass curing is higher than 80% combined with high winds speeds through the peak burning time of the day (12pm-4pm) these activities are monitored closely or carried out at different times such as earlier in the morning or in the evenings when it is cooler.

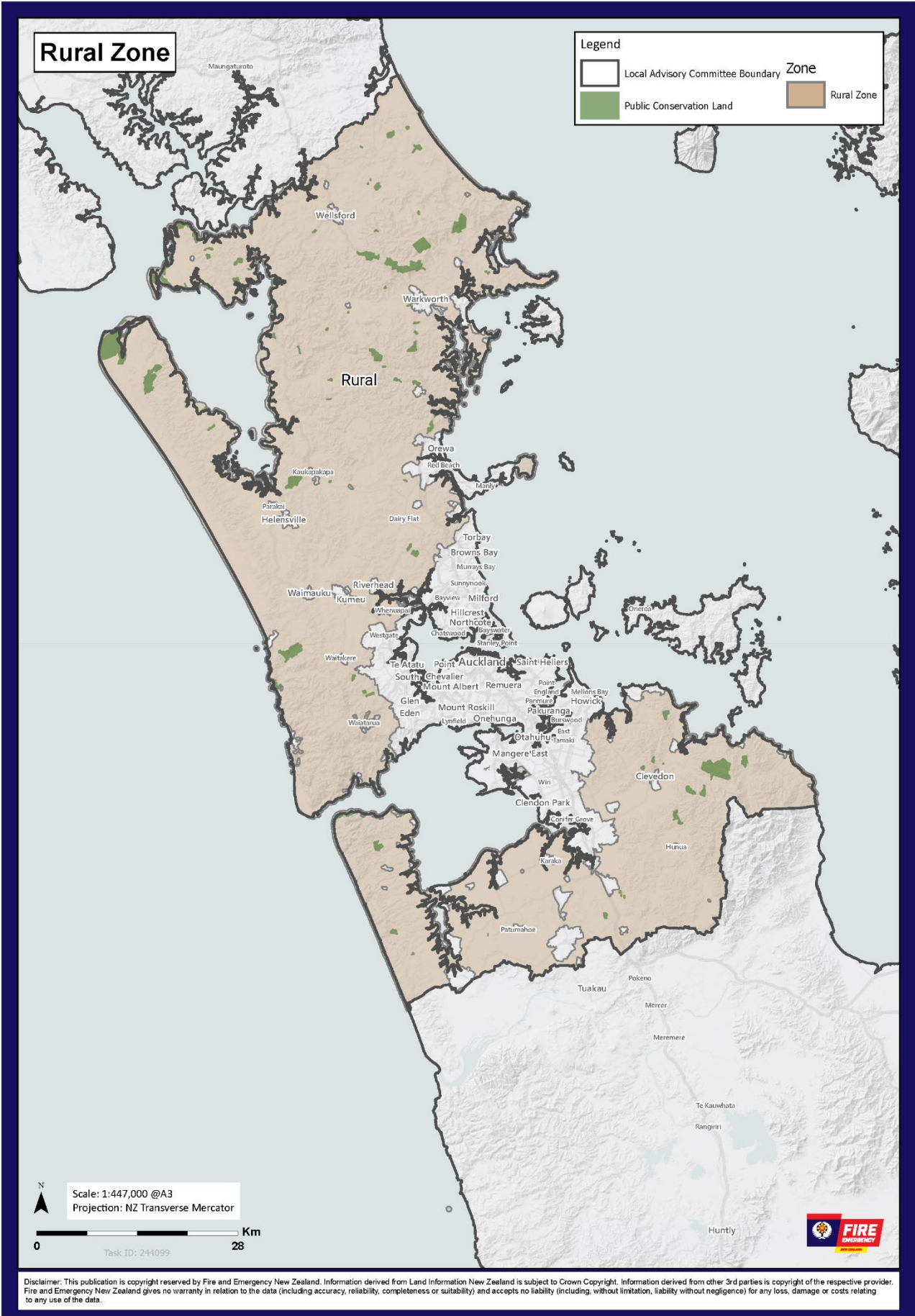
Representative remote automated weather stations

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

Kaipara	Te Akau
Leigh	Whangaparāoa Aws
Auckland MOTAT	Māngere
Skid Site Ews	Mangatawhiri Dam Ews
Woodhill	Waharau
Cornwallis Depot	Clevedon Coast
Patumahoe	Mahurangi Forest

We will also consider the forecast for these location(s) when declaring or revoking a fire season.

Rural zone map



Mainland urban zone

Geography

The Auckland Central Business District (CBD) covers 433 hectares in a triangular area bounded by the Waitematā Harbour and the inner suburbs of Ponsonby, Newton, and Parnell. At its heart is the built-up area stretching from Ōrewa in the north to Papakura in the south and from west of Henderson to east of Howick. Beyond lie rural areas around the towns of Wellsford, Warkworth, and Helensville to the north and Clevedon, Pukekohe and Waiuku to the south.

The Auckland mainland has approximately 53 volcanoes in the field that have produced a diverse array of maars, tuff rings, scoria cones, and lava flows.

Auckland City is on a narrow strip between two harbours: the Waitematā and the wide, shallow Manukau.

Demographics

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

Ninety percent of the population of Tāmaki Makaurau (1,419,169 people) live in the urban area. The population is estimated to grow to 1,937,100 by 2043.

The most significant growth is anticipated for the central area and Maungakiekie-Tāmaki area (Glen Innes, Point England, Panmure, Tāmaki, Mount Wellington, Onehunga and One Tree Hill). Manurewa, Ōtara-Papatoetoe and Papakura are also growing faster than the average.

	Populati on	European /Pākehā	Māori	Pacific peoples	Asian	Middle Eastern, Latin America n, African	Other
Urban	1,419,169	52.7%	11.5%	16.0%	29.1%	2.3%	1.1%

Māori represent a significant proportion of southern urban population of Papakura (26.8 percent) and Manurewa (26 percent).

Asian populations have increased most across the urban area of Tāmaki Makaurau. Hillsborough, Lynfield, Mount Roskill, Roskill South, Three Kings, Waikōwhai and Wesley have the largest proportion of Asian people in Tāmaki Makaurau, making up 49 percent of its population base.

Howick area also has a high Asian population, representing 14 percent of Tāmaki Makaurau Asian residents.

Pacific peoples represent a large proportion of the residents in southern urban areas Māngere-Ōtahuhu area (nearly 60 percent), Ōtara-Papatoetoe (46 percent) and Manurewa (36.6 percent)

Across the urban area, residents from overseas who have lived in the area for up to four years make up about 25 percent of the population base.

In the Howick area, residents from overseas who have lived in the area for up to four years make up nearly a third of the population (30.5 percent).

In Whau and Ōtara-Papatoetoe residents from overseas who have lived in the area for up to four years are nearly a quarter of the population (24.7 percent and 22.5 percent).

To the north, new migrants are highest in Devonport (27.8 percent), Upper Harbour area (24.9 percent), Waitākere Ranges (24.3 percent), and Henderson-Massey (22.6 percent).

The percentage of residents who don't speak English is highest in Howick (at 8.3 percent). Upper Harbour (7.5 percent), Ōtara-Papatoetoe (7.5 percent) and Whau (6.6 percent), also have some of the highest percentages of residents who do not speak English.

There are polarising levels of deprivation across urban Tāmaki Makaurau

While the Deprivation Index for the area has an average of 5.5, some areas - such as inner west or inner south-east - significant proportions of the population rate high on the Deprivation Index.

Over half of residents in Ōtara-Papatoetoe (69 percent), Manurewa (62 percent) and Māngere-Ōtahuhu (60 percent) live in high deprivation (9–10 on the index).

Up to 40 percent of residents in Papakura live in high deprivation, while 20 percent of residents in Whau and Henderson-Massey live in overcrowded accommodation.

Over 20 percent of residents in Whau and 31 percent of Henderson-Massey residents live in areas of high deprivation (9–10 on the scale).

In contrast, deprivation and overcrowding are lowest in Ōrākei with only 3 percent of residents rating 9–10 on the Deprivation Index, and 7 percent in crowded households. It is also low in Mount Albert and Mount Eden, with only 5 percent at 9–10 on the Deprivation Index and 14 percent in crowded housing.

Climate/ weather

The mainland urban zone is strongly affected by the coastal influences of the three harbours, the Waitākere Ranges, and the Hunua Ranges. The predominant winds and weather patterns are from the south-west to west, with the Waitākere Ranges and Hunua Ranges receiving the bulk of the rainfall compared to the eastern areas of the mainland.

The two ranges create a bowl effect which leads to a predominantly humid summer and dry eastern areas.

Land cover/ land use

The geography of the isthmus is highly diverse, being formed from a patchwork of volcanic scoria cones, lava flows, explosion craters, and older sedimentary rocks. Approximately 75 percent of land cover is urban and industrial use.

Many coastal villages have only one way in and out, so escape routes will be compromised.

A number of remnants of native forest (Kepa Bush, Dingle Dell, Wattle Bay, Domain Forest) and wetlands (Western Springs, Waiatarua, Tahuna-Torea) remain.

The urban zones of Māngere, Ōtāhuhu, Howick, Manurewa, Papakura, Ōtara and Papatoetoe include flat, relatively fertile plains to the south and east of the city.

Land cover, however, has been heavily modified by human activity in the past 150 years with approximately 3 percent native vegetation remaining. This area is largely urban with approximately 60 percent total cover.

Whau, Henderson-Massey, and the western part of Upper Harbour mostly comprise low-lying, fertile soils that have been intensively developed for food

production, urban or industrial use. Almost three quarters (70 percent) of the total area has been developed for urban use. Very little native vegetation remains on the land.

The northern part of the city is dominated by steeper hills surrounding an ‘island’ of more fertile, low-lying sediments in the Albany Basin.

The northern urban-rural fringe has a much lower cover of urban growth (approximately 35 percent), with relatively large areas of indigenous forest and scrub, and farmland.

The forested Waitākere Ranges are the eroded remains of a 20-million-year-old volcano that was centred approximately 20 km offshore from the present west coast.

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
Large-scale construction • Spark causing activities	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
State housing redevelopment • Spark causing activities	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Tourism, including international visitors • Increase in people without knowledge of fire risk or rules	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Tāmaki Makaurau generates nearly 40 percent of the country’s GDP through a diverse mix of industry.

The city centre creates 200,000 jobs, 35 percent of which are in high-end professional and financial services. However, three-quarters of the workforce of Tāmaki Makaurau are in other parts of the city, such as the industrial and logistics precinct near the airport, or the rural areas.

Large scale construction increases the potential for unwanted fires. The burning of rubbish at construction sites across the area increases the risk of spread and also impacts on the increase in unwanted calls.

Tāmaki Makaurau is in the midst of a construction boom, which is forecast to continue well into the next decade. In 2018 there was \$28 billion of large construction projects underway. Development and subdivision activities have the potential to cause unwanted fire.

Visitors to Tāmaki Makaurau are unlikely to be aware of fire risk or rules preventing the use of outdoor fires. We consider this when exercising our powers of fire control. The level of awareness differs between different groups, but visitor numbers have been increasing, particularly the numbers visiting the parks, beaches and other open spaces within the fire plan zone.

Until the COVID-19 pandemic, Tāmaki Makaurau was averaging over 2.5 million visitors a year through the Auckland Airport. In the five-year period between

March 2013 and 2018, visitor spend within the Tāmaki Makaurau region increased from \$5.4 billion to \$8.4 billion. International visitor arrivals increased by more than 840,000. The four major sources of international visitors to Tāmaki Makaurau are Australia, China, the USA and the UK. With this high level of visitor traffic, over half of which are visiting New Zealand on holiday, there is potential for unwanted or unpermitted fires occurring in our forests or open spaces as the tourists use and camp with little knowledge of the risks and rules put in place to mitigate a fire.

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
Roading network <ul style="list-style-type: none"> Sparks from vehicle malfunction, discarded cigarettes Spark causing activities during road maintenance and mowing 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Railway line <ul style="list-style-type: none"> Sparks from passing trains and during track maintenance 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Airports <ul style="list-style-type: none"> Requirement for notification and permission for burns in flight path, under CAA rules Protected by own controls on use of fire and other activities in vicinity 	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Marinas <ul style="list-style-type: none"> Protect by applying controls to surrounding areas 	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Freight hubs <ul style="list-style-type: none"> Protect by applying controls to surrounding areas 	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Fuel and gas lines and storage <ul style="list-style-type: none"> Protected by own controls on use of fire and other activities in vicinity 	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Water dams, reservoirs and treatment plants <ul style="list-style-type: none"> Protect by applying controls to surrounding areas 	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Wastewater treatment plants	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<ul style="list-style-type: none"> • Protect by applying controls to surrounding areas 			
Telecommunications network and towers <ul style="list-style-type: none"> • Protect by applying controls to surrounding areas 	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Electricity transmission lines <ul style="list-style-type: none"> • Sparking during high winds • Use of auto-reclosers limited in high fire danger • Recommended vegetation mitigation practices 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Motorways and rail lines increase the risk of wildfire

The south-east of Tāmaki Makaurau is a transport hub, home to over 53 percent of Tāmaki Makaurau transport industry jobs as well as major transport infrastructure including the southern motorway, rail, and Auckland Airport. Due to the ease of access to goods and services transport, the district is also a well-established manufacturing hub, accounting for 44 percent of all manufacturing jobs in Tāmaki Makaurau. The creation of large warehouses, and traffic on our main trunk line increases the risk of fire.

Recreational locations

Recreational activities/locations that will be affected by Fire and Emergency exercising its fire control powers.

- Local parks
- Art walks

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 due to a restriction on activities can have 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.

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
Marae – hāngī and other cultural fires	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Agricultural events and markets <ul style="list-style-type: none"> • Use of machinery – sparks 	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Festivals, particularly held over multiple days with camping <ul style="list-style-type: none"> • Campfires • Increase in people without knowledge of fire risk or rules 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Fireworks <ul style="list-style-type: none"> • Use may be prohibited during high fire danger. Prohibited under S52 in some locations • Pyrotechnics managed by other approvals 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Horse riding, mountain biking <ul style="list-style-type: none"> • Access restricted during high fire danger 	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Motorsports e.g., rally, 4WD and dirt biking <ul style="list-style-type: none"> • High temperature operating parts and sparks from vehicles 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Hunting, camping, hiking or tramping <ul style="list-style-type: none"> • Campfires • Access restricted during high fire danger 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Beach fires <ul style="list-style-type: none"> • Campfires • Ecological values at risk • Marine flares 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Art walks <ul style="list-style-type: none"> • Increase in people without knowledge of fire risk or rules 	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Agricultural hobbies, e.g., non-commercial fruit, plant or tree growing, animal and bee keeping <ul style="list-style-type: none"> • Burn offs • Less knowledge of fire risk or rules 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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
Tūpuna Maunga (ancestral mountains) <ul style="list-style-type: none"> • Increase in people without knowledge of fire risk or rules • Access restricted during high danger 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Lava forest fragments, e.g., Gribblehirst Park, Mount Eden	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Shakespear Regional Park; significant habitat and wildlife	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Paremoremo Scenic Reserve; Site of Special Wildlife Interest (SSWI).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Māngere and Ōtāhuhu estuarine habitats	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
urban area; 1,674 sites of historic or cultural significance, 14 scheduled heritage areas <ul style="list-style-type: none"> • People without knowledge of fire risk or rules 	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Tūpuna Maunga (ancestral mountains) within Tāmaki Makaurau hold a paramount place in the historical, spiritual, ancestral and cultural identity of the 13 iwi and hapū of Ngā Mana Whenua o Tāmaki Makaurau.

The Tūpuna Maunga are revered by mana whenua as the creations of Mataaho (the guardian of the Earth's secrets) and Ruaumoko (the god of earthquakes and volcanoes). They were significant areas of settlement, agriculture, battles, marriages, birth and burial.

The 15 Tūpuna Maunga are:

- Matukutūruru
- Maungakiekie / One Tree Hill
- Maungarei / Mount Wellington
- Maungawhau / Mount Eden
- Maungauika / North Head
- Ōwairaka / Te Ahi-kā-a-Rakataura / Mount Albert
- Ōhinerau / Mount Hobson
- Ōhūiarangi / Pigeon Mountain
- Ōtāhuhu / Mount Richmond
- Pukewīwī / Puketāpapa / Mount Roskill
- Rarotonga / Mount Smart
- Te Kōpuke / Tītīkōpuke / Mount St John
- Takarunga / Mount Victoria

- Te Tātua a Riukiuta / Big King
- Te Ara Pueru / Te Pane-o-Mataoho / Māngere Mountain

Close to the city, forest remnants include tiny fragments of lava forest (e.g., Gribblehirst Park and Mount Eden) which is a significant and highly threatened ecosystem type both regionally and nationally.

Whangaparāoa Peninsula on the north-east coast contains one of the larger Tāmaki Makaurau regional parks, Shakespear. This park includes a variety of significant habitat and wildlife, including a number of native skinks (e.g., shore and moko skink) and birds (e.g., little spotted kiwi, korimako/bellbird, kākārīki/red-crowned parakeet, pāteke/brown teal, pōpokotea/whitehead, toutouwai/North Island robin, tīeke/North Island saddleback).

Paremoremo Scenic Reserve, at 107 hectares, is a large bush reserve just outside the city. It is a Site of Special Wildlife Interest (SSWI). The reserve has a substantial area of undisturbed interior habitat with high botanical diversity and contains significant examples of kauri-podocarp-broadleaved forest, kauri-hard beech forest, kauri-tānekaha forest and mānuka-dominant gum land.

Paremoremo Scenic Reserve supports one of the highest diversities of indigenous bird species in the Tāmaki Makaurau urban area. The species include kererū, tūī, kōtare/sacred kingfisher, pīwakawaka/New Zealand fantail, tauhou/silvereye, warou/welcome swallow, and riroriro/grey warbler. The reserve also provides critical riparian buffering to Paremoremo Creek, which in turn supports threatened species such as longfin eel (Threatened - Declining), kōura/freshwater crayfish (Threatened - Declining), and īnanga/whitebait (Threatened - Declining).

In Māngere and Ōtāhuhu, estuarine habitats are the most common native vegetation, most of which are located in major watercourses. These estuarine areas are home to migrant and native bird species, several of which are threatened. Native forest and scrub, once the most widespread land cover in this area, has been reduced to a few small, scattered fragments.

The Waitākere Ranges is the second largest block of continuous vegetation on the mainland in Tāmaki Makaurau (after the Hunua Ranges). Approximately 75 percent of the remaining native vegetation is protected; most of this is within the Auckland Council-managed Waitākere Ranges Regional Park.

Te Henga is one of New Zealand's most significant mainland petrel areas, with at least four species breeding there: ōi (grey-faced petrel), kuaka (northern diving petrel), tītī (sooty shearwater), and toanui (flesh-footed shearwater).

Due to the city's settlement history, the inner isthmus has the highest concentration of heritage places and heritage areas. Devonport and Takapuna also have one of the highest concentrations of heritage sites.

The built area of Tāmaki Makaurau has 1674 sites of historic or cultural significance and 14 scheduled heritage areas.

Known fire hazards

- Closed landfills
- Recycling centres
- Scrapyards

Frequency of elevated fire danger

On average, this zone experiences:

- 1.5 of days of extreme forest fire danger
- 4 of days of very high forest fire danger

Fire history

The known fire history for this zone includes:

Year	Fire	Cause
2023	Māngere Mountain	Matches/Lighter (Kids)
2023	SIMS Metal NZ	Lithium Battery
2021	Greenhithe Local Park 5 ha	Mowing
2019	Māngere Mountain 4ha	Fireworks
2019	Maungarei / Mount Wellington 2 ha	Fireworks
2019	International Convention Centre, 87-93 Wellesley Street West, Auckland Central	Accidental Ignition (combustible material)

Predominant fuel type

The predominant fuel type in this zone is grassland with pockets of scrub around the open space areas and close to the urban-rural fringes.

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

The thresholds above relate to the most prominent fuel type within the zone but can't be used in isolation. Considerations below will also be used for fire season changes. The trigger for the Urban zone will normally follow that of the adjoining Rural zone using the BUI.

Considerations include:

- large population
- the risk of the 12,000 to 18,000 lifestyle properties bordering significant areas of property, both residential and industry
- the boundary is very hard to define by the public and communicating the zone boundary's is problematic
- the high numbers of transient population traveling to, through and from each zone
- the Auckland Council has rules relating to outdoor burning within the urban zones

Prohibition on fires in open air (section 52)

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Other local thresholds have not been set.

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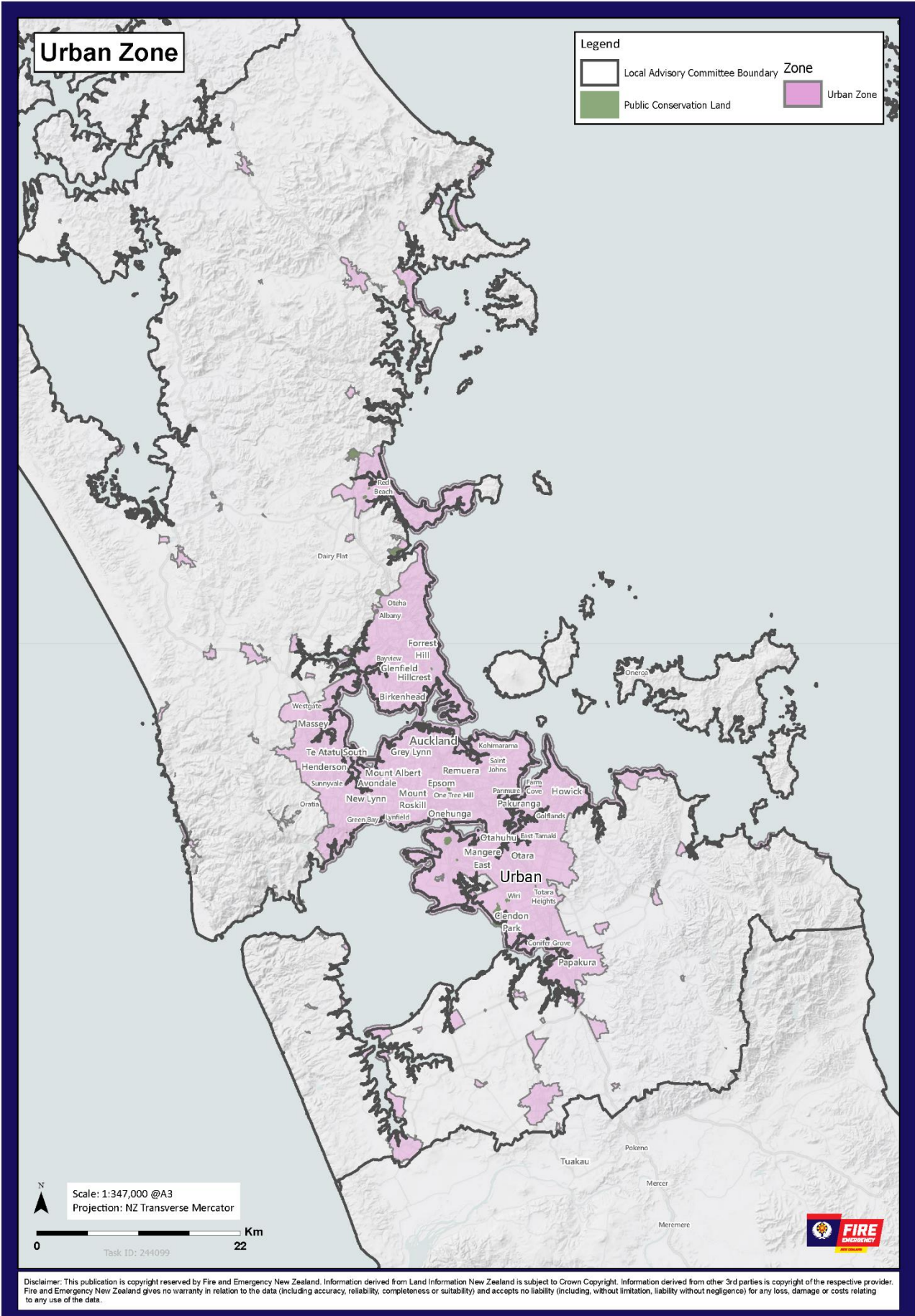
Representative remote automated weather stations

The Remote Automated Weather Stations (RAWS) used to determine whether we have reached the trigger thresholds is an average of all the RAWS within the fire plan area, including the Waharau station.

Weather data is also utilised from the network of Auckland Council monitoring sites when considering season changes.

We will consider the forecast for these locations when declaring or revoking a fire season.

Mainland urban zone map



Islands zone

Geography

The Hauraki Gulf Islands are located off the east coast of the Tāmaki Makaurau mainland.

The islands include populated islands, in particular Waiheke and Aotea (Great Barrier) Island, and conservation or unpopulated islands.

The islands are geographically isolated from the rest of Tāmaki Makaurau and are accessible by sea and air, with Aotea (Great Barrier) having two local airports and Waiheke one.

Some islands or communities are only accessible by watercraft. This can make access for fire suppression or evacuation delayed and difficult.

Demographics

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

Population

The population of the islands is growing slower than the Tāmaki Makaurau average

- Aotea (Great Barrier) has not seen population growth between 2013 to 2018. Its population was approximately 936 people in 2018
- Aotea (Great Barrier) represents 0.1 percent of the Tāmaki Makaurau population, unchanged from 0.1 percent at the 2013 Census.
- Waiheke has grown slower than wider Tāmaki Makaurau (11.0 percent increase) with an 8.7 percent increase between 2013 and 2018. 9,063 people in 2018.
- Waiheke represents 0.6 percent of the Tāmaki Makaurau population, unchanged from 0.6 percent at the 2013 Census.
- The projected population of the islands is 12,280 by 2043 (1,180 on Aotea (Great Barrier) and 11,100 on Waiheke).

Ethnicity and age

Residents of the islands predominantly identify as NZ European. The resident population is older than the Tāmaki Makaurau average.

Aotea (Great Barrier) Island has a higher resident population who identify as Māori than the Tāmaki Makaurau average. Tangata whenua can trace their association with the island over many centuries, and to this day descendants still remain on the island.

The population is relatively stable with few new migrants.

The community has an older population base with 25 percent of residents aged 65 years or over.

Waiheke has lower resident population that identify as Māori than the Tāmaki Makaurau average.

It has a higher immigration rate than the outer populated islands with a quarter of residents arriving from overseas in the last four years. The highest demographic growth has been in Pacific Peoples.

Twenty-one percent of the population are aged 65 or over.

Aotea (Great Barrier) Island

- 91.3 percent identified as European (compared to 53.5 percent Tāmaki Makaurau).
- 20.5 percent identified as Māori (compared to 11.5 percent Tāmaki Makaurau).
- 2.6 percent identified as Pacific peoples (compared to 15.5 percent Tāmaki Makaurau).
- 1.6 percent identified as Asian ethnicity (compared to 28.2 percent Tāmaki Makaurau).
- 14.0 percent overseas-born residents of Aotea (Great Barrier) arrived in the last 4 years.
- 0.3 percent of Aotea (Great Barrier) residents cannot speak English

Waiheke Island

- 88.9 percent identified as European (compared to 53.5 percent Tāmaki Makaurau).
- 11.4 percent identified as Māori (compared to 11.5 percent Tāmaki Makaurau).
- 4.0 percent identified as Asian ethnicity (compared to 28.2 percent Tāmaki Makaurau).
- 3.8 percent identified as Pacific peoples (compared to 15.5 percent Tāmaki Makaurau).
- 3.1 percent of Waiheke residents cannot speak English.
- 24.7 percent overseas-born residents of Waiheke arrived in the last 4 years.

Home and living

Less than 20 percent of residents on Aotea (Great Barrier) earned over \$30K in 2018. Ten percent of residents live in overcrowded households. There are high levels of deprivation across the island, with 17 percent of residents rating 10 on the Deprivation Index.

More than half of Waiheke residents earned less than \$30K per year in 2018. Nine percent of residents live in overcrowded households, although lower levels of deprivation with only 2 percent of residents rating 9–10 on the Deprivation Index.

Climate/weather

The Islands' climate is strongly influenced by the coastal environment. Being situated in the Hauraki Gulf to the east of Auckland City, the islands are partially protected from the prevailing colder, wetter west and southwest winds, making it both drier and warmer than the Auckland City isthmus. Rainfall is often in high volume deluges and not linked to the mainland weather pattern. The ocean acts as both a fan and an insulator. Sea breezes moderate rising temperatures in mid-summer and allow for reasonably predictable wind patterns. The ocean moderates falling temperatures at night.

**Land cover/
land use**

Across Aotea (Great Barrier) Island, Hauturu (Little Barrier) Island, and the Mokohinau Islands group, vegetation predominantly comprises native re-growth following logging; kānuka forest, and mānuka scrub and forest are the most common components.

These islands have the lowest percentage of urban cover (approx. 0.3 percent). Most of the remaining land cover is characterised by pasture, mainly on low-lying, flat land surrounding the lower reaches of the major rivers.

Hauturu and some of the Mokohinau Islands have remained unmodified by human activity associated with farming and resource extraction by European settlers.

The inner Gulf Islands include Waiheke, Ponui, Rangitoto, Motutapu and Browns islands. With the exception of Rangitoto, they have been highly modified by human occupation farming activities, many having been almost cleared of native vegetation.

Introduced vegetation covers almost half of the areas of these islands, which is dominated by productive pasture and lesser amounts of vineyards and olive groves.

Rangitoto Island is largely unmodified and dominated by pōhutukawa forest over lava flows.

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
Tourism and recreation <ul style="list-style-type: none"> • People unfamiliar with local fire risk and rules • Access to locations may be restricted 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Primary production, including horticulture and agriculture <ul style="list-style-type: none"> • Use of machinery – sparks • Use of fire for land management • Relevant operations affected 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Fishing <ul style="list-style-type: none"> • Campfires and flares 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Construction <ul style="list-style-type: none"> • Spark causing activities 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Aotea (Great Barrier) and Waiheke are major tourism destinations, with Waiheke also well established as a producer and exporter of high-value beverages and artisanal food.

Tourism is the predominant source of employment and growth for the island district. While tourism brings many benefits to the island economies, the influx of people can put pressure on infrastructure. It can also create a risk of unwanted outdoor fires.

In the 5 years leading up to 2018, employment growth has been led by three key major industries:

- Accommodation and food services (23 percent of growth)
- Agriculture, forestry and fishing (18 percent of growth)
- Rental, hiring and real estate services (13 percent of growth).

Aotea (Great Barrier) Island

In 2018 there were 135 businesses in Aotea (Great Barrier) employing an average of 1.9 employees each, smaller than the Tāmaki Makaurau average of 4.5 employees. The number of businesses grew 1.8 percent a year on average over the last decade, a slower average growth rate than the Tāmaki Makaurau average of 1.9 percent.

Waiheke

Prior to COVID-19 travel restrictions, Waiheke had a booming tourism industry attracting 40,000 visitors a day during the summer season. The seasonality of Waiheke's tourism can create pressures on the island's infrastructure at peak times and usually occurs during the summer fire season.

Areas that have seen growth in employment over the last 5 years include:

- Professional, scientific and technical services
- Construction
- Accommodation and food services

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"> • Sparking during high winds • Use of auto-reclosers limited in high fire danger • Recommended vegetation mitigation practices 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Airport <ul style="list-style-type: none"> • Requirement for notification and permission for burns in flight path, under CAA rules • Protected by own controls on use of fire and other activities in vicinity 	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Ferry terminals	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<ul style="list-style-type: none"> Protect by applying controls to surrounding areas 			
Generators	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> Spark and heat causing activity 			

Recreational locations

Recreational activities/locations that will be affected by Fire and Emergency exercising its fire control powers:

- Parks and coastal walkways
- Art walks
- Activities associated with weddings and other celebration activities

Cultural and recreational activities and events

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
<ul style="list-style-type: none"> Marae – hāngī and other cultural fires 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<ul style="list-style-type: none"> Weddings and other celebration activities 	<input checked="" 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
Aotea (Great Barrier) Island: <ul style="list-style-type: none"> protected native vegetation threatened wildlife freshwater wetlands, saltmarsh and dune land 	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Waiheke and neighbouring islands: <ul style="list-style-type: none"> significant seabird breeding areas 	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
All islands – 228 scheduled heritage sites and three heritage areas	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Hauturu – Important intact ecosystem with numerous threatened species, especially kōkako, tīeke, short-tail bats	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Tiritiri Matangi – Restored Island with important	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

population of hihi(stitchbird), and intact lighthouse complex.			
Rangitoto, Motutapu – Pōhukawa forest and populations of shore plover and takahē.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mokohinau – Important seabird and herpetofauna (amphibian and reptile) populations.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The Gulf Islands have numerous ecological, cultural and historic sites, some of which are of national significance.

- Approximately 55 percent of the remaining native vegetation remnants on Aotea (Great Barrier) Island are in protected areas.
- Aotea (Great Barrier) Island is one of only two areas in the world in which the threatened tāiko (black petrel) have breeding colonies. The island also has thirteen native species of lizards, including niho taniwha (chevron skink), which is only found in Aotea and Hauturu. The island retains extensive freshwater wetlands, saltmarsh and dune land, all of which are nationally uncommon habitat types.
- Waiheke and its neighbouring islands contain significant seabird breeding areas including the at-risk kororā (little penguin), ōi (grey-faced petrel), and the very rare pārekareka (spotted shag).
- Across the islands, there are 228 scheduled heritage sites and three heritage areas.
- 124 places scheduled in the Hauraki Gulf Island District Plan relate to Māori origin archaeology.

Risks in remote areas and on islands are increased by a range of alternative heating, cooking, lighting and power sources requiring the storage of large quantities of highly flammable liquid fuels, solid fuels and liquefied gas.

The highly flammable fuel types are often found in coastal areas of the rural-urban interface where the majority of development and urban growth is occurring. Some of these areas include the eastern and western coastline communities, the islands of the Hauraki Gulf, and areas adjacent to exotic and native forested areas.

We consider the points above when setting the level of fire controls.

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

Fire history The known fire history for this zone includes:

Year	Fire	Cause
2017	Browns Island	Campfire/bonfire
2015	Waiheke Island	Fireworks
2013	Aotea (Great Barrier) Island	Cooking fire

Predominant fuel type

This zone is a mixture of scrubland and grasslands with pockets of native forested areas in Aotea and Hauturu.

Thresholds**Non-populated islands and Department of Conservation Islands – prohibited season year round**

The Department of Conservation has a significant role within the Hauraki Gulf islands. The conservation islands and islands administered by the Auckland Council within the Hauraki Gulf will be in a prohibited fire season 365 days of the year.

The isolation, significant ecological biodiversity values, vegetation type and large numbers of recreational users are contributing factors for the 365 days of the year prohibited fire season.

Fire and Emergency currently has an Operational Service Agreement with the Department of Conservation. Through this agreement and through consultation with the local area office of the Department of Conservation it has been agreed that these fire control measures will continue under the Fire and Emergency New Zealand Act 2017 for the conservation islands of the Hauraki Gulf.

The remaining public conservation land within the Rural and Urban zones follow the zone restrictions at these locations.

Populated islands

Build-up Index (BUI) 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)		
(%)	0–35	35–60	>60
0–50	Restricted	Prohibited	Prohibited
50–80	Prohibited	Prohibited	Prohibited
>80	Prohibited	Prohibited	Prohibited

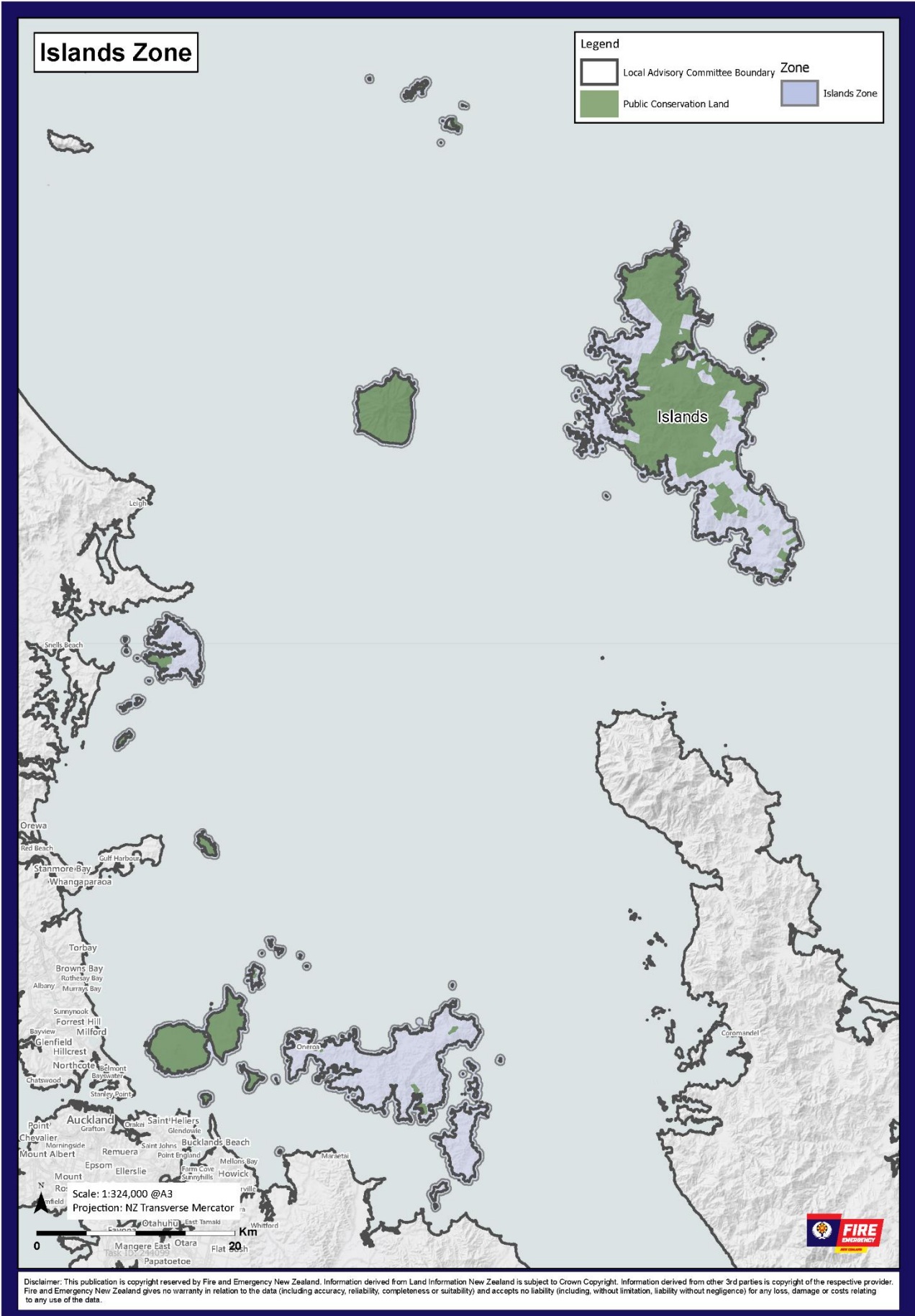
The populated Islands including Aotea (Great Barrier), Kawau, Rakino, Ponui and Waiheke will move to a prohibited season will be considered from as close to the 1 December or when the BUI is greater than 35. The date is used as a trigger of other fire conditions as its the start of the summer increase in population to the islands. The zone will then change back to restricted as close to the 1 April and when the BUI is less than 35.

Representative Remote Automated Weather Stations

The Remote Automated Weather Stations (RAWS) used to determine whether we have reached the trigger thresholds are Aotea (Great Barrier) and Clevedon Coast.

The average of the two stations are used to determine the thresholds, while representing both the inner and outer Hauraki Gulf Islands.

Islands zone map



New Zealand Defence Force

Scheduled Defence Areas

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.

Within the Tāmaki Makaurau local area, activities in the following defence areas are subject to New Zealand Defence Force fire control powers, including fire permit requirements:

- Whenuapai Airbase

Any New Zealand Defence Force activities, including training activities, in other Defence Areas in [Area name] are subject to Fire and Emergency's fire permit requirements, though not our other fire control powers.

Further information about the boundaries of the defence areas and applicable fire controls is available through www.nzdf.mil.nz/nzdf/contact-us

