

Fire Plan
Te Tai Tokerau – Northland
2024–2027



Document Title: Te Tai Tokerau – Northland [info type Fireplan

Published: TBC

Document review date: [published date + 3 years]

Status of this document

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Contents

Introduction	1
How to use this document	1
Why do we have fire plans?	1
Content of the fire plans.....	1
Describe local fire risk conditions.....	1
Set out policy	1
Set out procedures	2
Take Fire and Emergency’s other requirements, agreements and policies into account.....	2
Cover the entire area	2
Set out Fire and Emergency’s fire control powers	2
Local area and zones	2
Local area	2
Zones	3
Consultation	3
Publish a notice	3
Consider submissions	3
Include a list of key stakeholders	3
Review and amendment.....	3
4 Rs of emergency management	4
Reduction.....	4
Readiness.....	5
Response	5
Recovery.....	5
Our commitment to working with Māori as tangata whenua	6
National Framework for Fire Control	6
Our policies.....	7
Fire risk conditions.....	8
Fire seasons	9
Open fire seasons	10
Restricted fire seasons	10
Prohibited fire seasons	10
Trigger thresholds for changing fire seasons	11
Prohibiting fires in open air (section 52)	12
Trigger thresholds for prohibiting fire in open air.....	12
Restricting and prohibiting activities (section 52).....	12
Trigger thresholds for restricting or prohibiting activities under section 52	13
Activities and risk mitigation	13
Forestry operations	13
Powerline auto-reclosers	14
Hot works	14
Retail fireworks and pyrotechnics.....	14
Communicating changes in fire seasons and restrictions or prohibitions	15

Fire permits	16
Council by-laws, regional plans, legal covenants, or restrictions.....	16
When a permit is needed.....	16
Fire types	16
Authorised fire types, descriptions and conditions in a restricted fire season.....	17
Authorised fire types on public conservation land in a restricted fire season.....	19
Authorised fire types, descriptions and conditions in a prohibited fire season.....	21
Authorised fire types on public conservation land in a prohibited fire season.....	23
Permits in prohibited fire seasons or during prohibitions under section 52.....	23
Applying for a permit.....	24
Assessment.....	24
Mandatory conditions.....	25
Firebreaks	26
Fire hazard removal	26
Reporting fire hazards.....	26
Assessment of fire hazards.....	27
Initial review.....	27
Risk assessment matrix.....	27
Outcomes from the fire hazard assessment.....	28
Powers of entry.....	28
Fire hazard removal notice (section 65).....	29
Imminent danger notice (section 68).....	29
Regulatory compliance	30
Fire and Emergency’s role.....	30
Contact Fire and Emergency.....	30
General enquiries and questions.....	30
Lodge a complaint.....	30
Fire hazards.....	30
Local contacts for this plan.....	30
Glossary	31
Northland Information	33
Northland District map.....	33
Area overview	34
Schedule of stakeholders.....	39
National-level stakeholders.....	39
Area-level and zone-level stakeholders.....	41
Zone information	45
Muriwhenua Zone	45
Thresholds.....	50
Muriwhenua Zone Map.....	53
Far North Zone Group	54
Thresholds.....	60
Far North Zone Group Map.....	62
Whangarei Zone Group	63
Thresholds.....	68

Whangarei Zone Map.....	70
Kaipara Zone Group.....	71
Thresholds.....	76
Kaipara Zone Group Map.....	78
Islands Zone.....	79
Thresholds.....	82
Islands Zone Map.....	84
Public Conservation Land.....	85
NZ Defence Force.....	86
No scheduled Defence Areas.....	86

Document drafting information

Owner	[Owner role]
Steward	[Steward role]
Last reviewed	Click or tap to enter a date.
Review period	Choose an item.

Record of amendments

Version	Date	Author	Brief description of amendment
V0.1	[Month Year]	[Name]	[enter description of update]
V0.2			

Approval

Full Name:

Title: Region Manager

Date:

Signature

Add another block of other signatures as required

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

This means that we need to explain how we:

- set locally appropriate triggers for changing fire seasons for outdoor fires to:
 - require permits
 - prohibit fires
 - restrict activities that may cause unwanted fires
- apply our other powers to manage fire hazards or require firebreaks.

These explanations help people to understand what to expect, how to plan for this and what they need to do to comply with any requirements.

Content of the fire plans

Fire plans must 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 on recreational and economic activities unnecessarily.

Take Fire and Emergency'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'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.

The Fire and Emergency New Zealand (Fire Plans) Regulations 2018 indicate that Fire and Emergency must prepare and issue a fire plan for each local area as soon as possible after the boundaries of the 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 they season make 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
- say where you can see and read a copy of the plan
- say 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 closing date and time for submissions.

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 stakeholder engagement plan for the fire 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 Rs' sum up New Zealand's approach to emergency management – reduction, readiness, response and recovery.

Fire plans are a part of 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 next sections outline the work Fire and Emergency does in each of the 4 Rs.



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
- work with local government around provision of water for firefighting

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

Fire and Emergency can apply a number of statutory fire control powers to reduce risk:

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

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 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 • 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.
Socio-economic factors	Factors that influence the likelihood of fires being lit for cooking purposes and to dispose of rubbish in backyards, e.g. absentee owners and lifestyle blocks burning during holiday season. Expectations of the public to be able to light certain types of fires, e.g. cultural cooking fires.
Time of year	Time of year, e.g. land clearing forestry, land clearing hill and high country, late winter to spring.
Public knowledge – awareness of the risks	The expected public awareness of risks may be low, e.g. a large influx of visitors during summer holiday periods who may reasonably be expected to have little understanding of the risks of lighting fires in an area.
Proximity to property or other values	The closeness of property or other valuables to fire, for example: <ul style="list-style-type: none"> • life values, e.g. size of land parcels in an urban area • distance from commercial forestry.

Condition	Description
Ability to respond effectively	Factors that contribute to our ability to respond to an out of control fire include: <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 hazards 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 seasons are used 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 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 is in force at any time in an area or zone:

Open fire season



Open fire seasons are for periods when conditions enable people to safely use fire and manage the risks themselves. There is still a requirement to not cause or allow a fire to get out of control or leave a fire smouldering in a way that increases the likelihood of harm or damage arising from the start or spread of fire.

Restricted fire season



Lighting a fire is riskier than usual and you must get a fire permit. This permit may also have specific conditions to make sure you can light a fire safely and 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 stakeholders know what the current fire season is and understand how they can comply with the requirements.

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

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 that 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 this: ‘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 about 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 the 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.

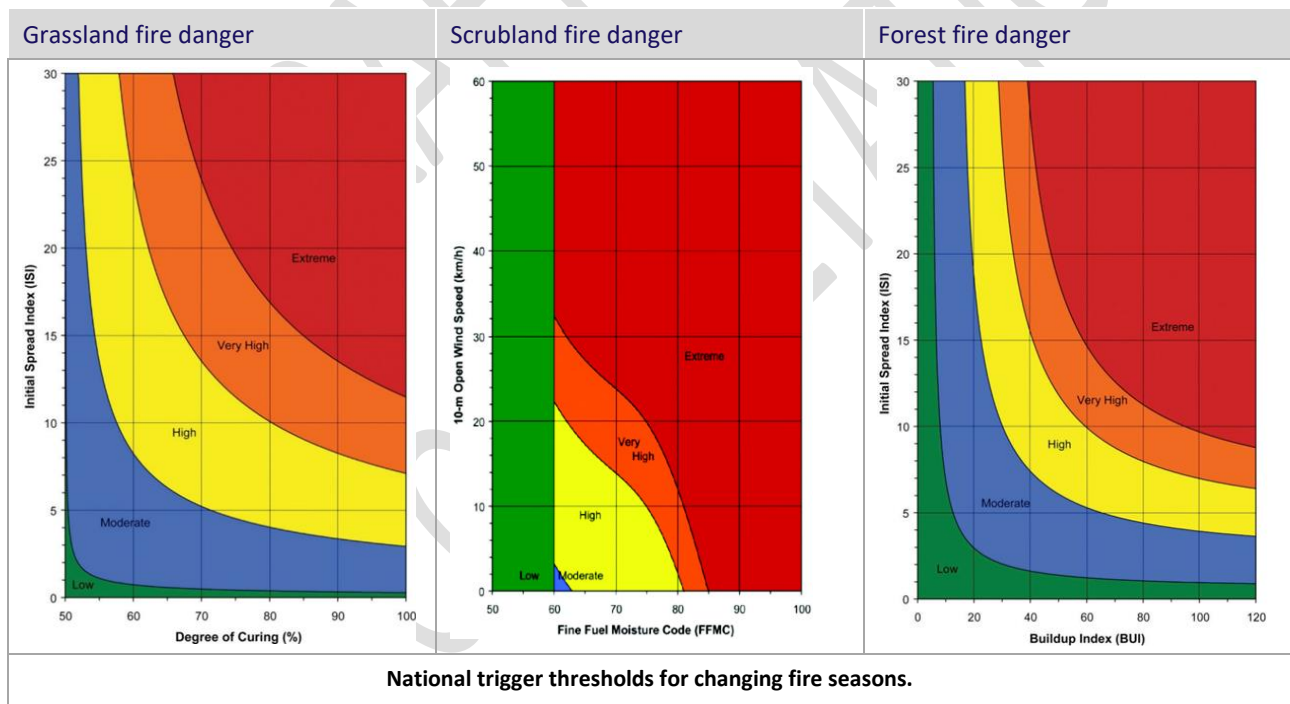
The trigger thresholds use:

- 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 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. We only use this control very rarely, in exceptional circumstances – for example:

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

Restricting and prohibiting activities (section 52)

Sometimes fire risk conditions are so high that certain activities may cause a fire to start or spread. These activities include:

- 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.

This 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's [Forest fire risk management guidelines](#) (2018) have trigger point tables and fire prevention actions at different fire danger levels. Fire and Emergency supports these guidelines.

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 they send a technician. If a downed wire caused 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 levels decided locally.

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 Federated Farmers through the Land Management Forums to discuss the approach to fire measures, using machinery and equipment during high fire danger periods and the potential effect on local landholders.

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 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 Works (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.

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](https://www.fireandemergency.govt.nz/fire-permits).

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](https://www.fireandemergency.govt.nz).

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

This 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 this condition, 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 Wood-fired pizza oven/wood oven	<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

Fire type	Description and conditions
	<p>front edge of the fire box. This is to stop any burning material falling from the fire box landing onto anything combustible.</p> <ul style="list-style-type: none"> • 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>
<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 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>
<p>Cultural cooking fires</p>	<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> <p>Find out more about the safe use of Cultural cooking fires.</p>
<p>Braziers Fire pits/bowls (Recreational)</p>	<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.

Fire type	Description and conditions
	<ul style="list-style-type: none"> 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

This 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 to surrounding flammable material left unsupervised while flame is present.

Fire type	Description and conditions
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, 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 it is 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 to 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> <ul style="list-style-type: none"> • The campfire in a permanent fireplace must not be: • 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 • lit during a prohibited fire season • lit in conditions where wind or other factors may cause the fire to spread to surrounding flammable material • left unsupervised while burning and without the ashes being fully extinguished • used to burn rubbish.

Fire type	Description and conditions
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 3km 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 to surrounding flammable material • left unsupervised without the ashes being fully extinguished • used to burn rubbish. <p>Note: This only applies 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 Lands 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>Conditions</p> <p>Find out more about the safe use of Gas BBQs, cookers and heaters.</p>

Fire type	Description and conditions
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>
Permanent outdoor fireplace Wood-fire pizza oven/wood oven	<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 <p><i>Table continues over page</i></p>

Fire type	Description and conditions
	<ul style="list-style-type: none"> 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 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>
Cultural cooking fires	<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> <p>Find out more about the safe use of cultural cooking fires – fireandemergency.nz > Traditional or cultural use of fire.</p>

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

This 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	<p>Manufactured gas-operated appliances, such as barbeques, outdoor fireplaces and outdoor gas heaters.</p> <p>Find out more about the safe use of Gas BBQs, cookers and heaters.</p>

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 Bio-security 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 special Fire Permit 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 permits 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 a permit applications if:

- they have insufficient information to make a desk-based assessment, or
- where any of the following apply to the proposed fire:
 - it is during a prohibited fire season
 - it requires a burn plan
 - it is in a location where the predominant fuel type is considered to be of high flammability
 - it is in a location that is adjacent to areas of significant commercial or environmental values
 - it involves multiple fires burning at the same time in different locations on a property
 - it is located on steep or complex terrain
 - 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 03 341 0266.

For fire permits where the public are likely to notice the fire 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 **Lighting a fire in an open season** 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 low 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 work towards 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? Gives consideration to the fire having sufficient energy to actually cause damage to property if spread to it, or to compromise the health of property users.

Risk assessment matrix

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

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

- using the risk of ignition and likely consequence ratings to determine the risk assessment score in the matrix

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

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

Score	Next course of action
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.
2. Providing education and information to the occupier or owner of the land, and/or to the complainant, on how to mitigate any risks from fire. We would do this where the notice threshold has not been reached but the assessment indicates that proactive action would be helpful.
3. 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.
4. 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

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

Glossary

4Rs – 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.

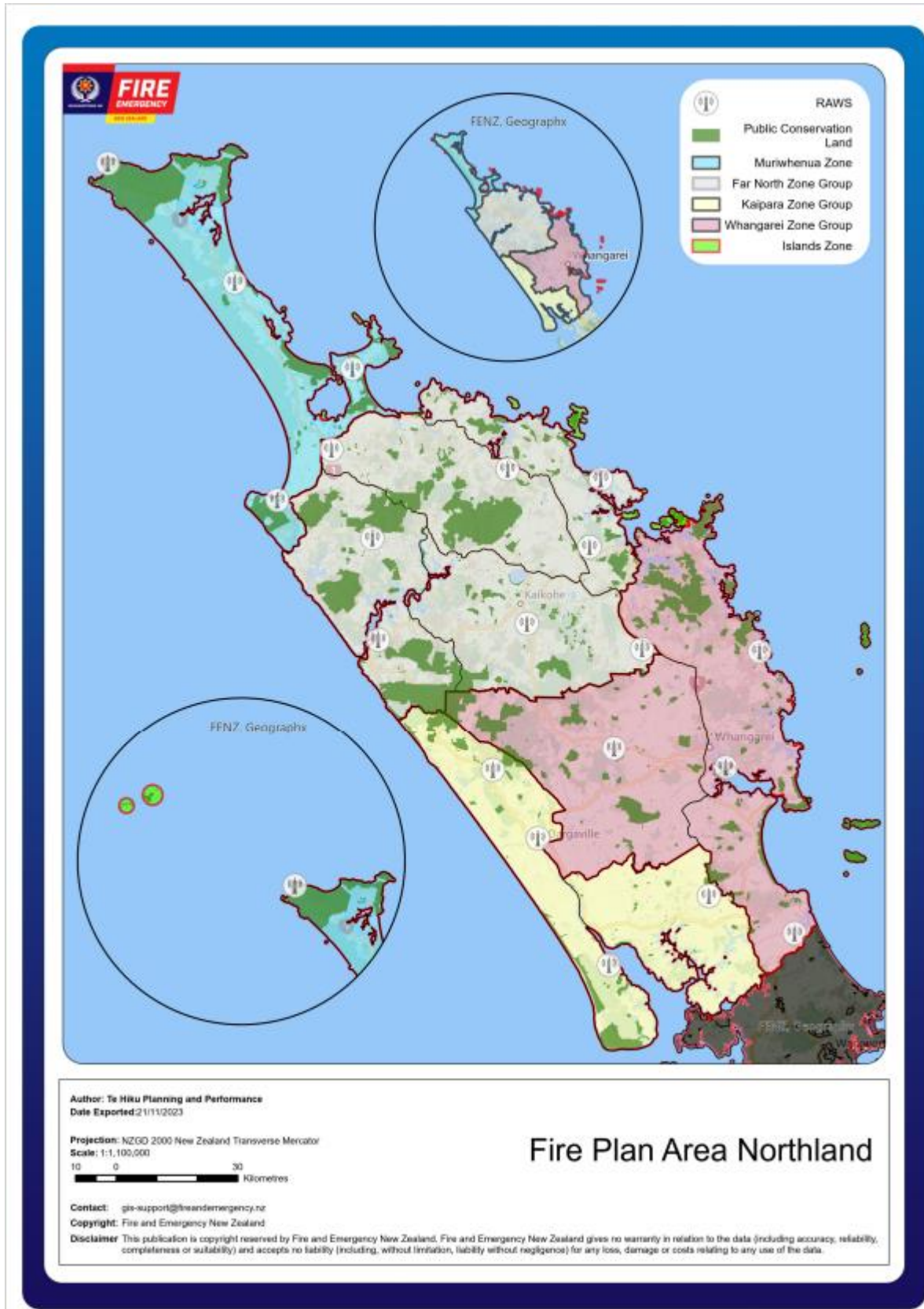
Scientific Reserves – Per the [Reserves Act 1977](#), the principal purpose of these reserves is the protection and preservation in perpetuity of areas for scientific study, research, education and the benefit of the country.

DRAFT FOR CONSULTATION

Northland 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.

Northland District map



Area overview

Geography

The area covered by this plan is 12,182 square kilometers.

Northland has three territorial districts that are covered by three territorial authorities: The Far North, Whangarei, and Kaipara District Councils.

The landscape is highly complex and varied, with tracts of native forests, contained valleys, scrub-clad hills, farms, orchards, and plantation forests. As can be seen from the table below, pastoral farming, indigenous forest and exotic forest make up 81 percent of the land cover.

The coast is a key part of the landscape, and coastal weather patterns influence fire danger and behavior.

Flooding during winter months is more likely where plains are situated between hill ranges, and in estuary catchment areas where tidal cycles can exacerbate effects.

Demographics

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

At-risk groups

Fire and Emergency actively seeks to identify risk profiles of the communities it serves so intelligence-led decisions can be made.

Studies and analysis have identified several population groups who are statistically more likely to be affected by structure fires, which could in turn also translate to wildfires. These include:

- children under 10
- adults over 64
- lower socio-economic households

One area of risk is young people as they can be inquisitive and may lack an understanding of the possible consequences of fire. Older members of our communities may be less mobile, and more vulnerable should a fire occur.

Northland also has the lowest per person median income in New Zealand, almost \$200 per week lower than the New Zealand median. Approximately 45 percent of the local area population lives in rented accommodation, Northland has the lowest per person median living in owner-occupied housing.

The risk of a fire occurring, or escaping, is significantly greater in communities that experience higher deprivation. The finances of individuals in these communities may not allow for risk reduction measures like; maintaining smoke alarms in their homes or the disposing of domestic rubbish appropriately.

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 condition. Areas are given a score from 1 to 10, with 1 representing communities that experience the least deprivation, and 10 representing the communities experience the most deprivation. The New Zealand average is 5.5.

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 regarding fire risk reduction, e.g. planned Home Fire Safety Visits to isolated lower

socio-economic communities, and promotion of our FireWise programs Aupouri mahi

	Northland LAC	Te Aupōuri Zone	Far North Zone Group	Whangārei Zone	Kaipara Zone
Population	179,562	9,876	57,618	24,372	87,696
Deprivation Index	7.0	8.2	7.9	7.0	6.4
European (NZ)	74.1%	62.8%	65.4%	84.0%	78.0%
Māori	35.9%	56.7%	47.4%	25.5%	30.0%
Pacific peoples	4.2%	5.6%	4.7%	3.6%	3.9%
Asian	3.9%	2.0%	3.0%	2.8%	4.7%
Middle Eastern, Latin American, African	0.5%	0.6%	0.5%	0.3%	0.6%
Other ethnicity	1.4%	1.5%	1.3%	1.5%	1.5%
Age 0 to 14	21.0%	22.1%	21.71%	19.4%	21.1%
Age 15 to 29	16.1%	15.2%	16.1%	14.8%	16.6%
Age 30 to 64	43.3%	43.8%	43.1%	44.5%	43.5%
Age 65+	19.5%	18.8%	19.0%	21.2%	18.9%

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

Zones

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

In total there are 11 fire season zones in the Northland Area. Some of the zones have been gathered into groups that are characteristically similar and/or in geographic proximity to each other. Each zone has been described in the Zone Information section below, either individually or as a group of zones.

The configuration of the zones considers the different fire risk conditions that can exist from one coast to the other, from the north to the south of the area and in the centre of the island. Depending on the prevalent weather pattern that exists across Northland, each of the zones can experience a variety of different fire weather conditions. This configuration allows for flexibility to apply a fire season that most accurately reflects the fire weather conditions in that location at that time.

The zones and groups are:

[Muriwhenua Zone](#)

[Far North Zone Group](#)

- Whangaroa Zone
- Peria-Puketi Zone
- Hokianga Zone
- Kaikohe Zone

[Whangarei Group](#)

- Tutukaka Zone

- Titoki Zone
- Waipu Zone

Kaipara Group

- Ripiro Zone
- Paparoa Zone

Islands Zone

Muriwhenua Zone is characterised by sandy free draining soils and exposure to higher winds than the rest of the district. As a result, the fire danger for this zone can be elevated, even during winter months.

Far North, Whangārei and Kaipara Zone Groups are similar in fire danger progression throughout the fire season. However, having the 11 zones in Fire Plan for Northland allows for more flexibility in setting fire season status in different parts of the district due to local climatic variations.

The Islands Zone features offshore islands located along the whole coastline of Northland as well as islands in harbours.

Within each fire season zone, public conservation land is identified. This land will be treated the same as all other land in the Northland Fire Plan Area, as well as treatment relating to anything else agreed to in The Operational Service Agreement (OSA) 2021 – between Fire and Emergency New Zealand and the Department of Conservation.

A year-round (365 day) restricted fire season will be in place in respect of public conservation land or additional land in the Northland Fire Plan Area as provided for in the OSA.

When considering whether to declare a restricted or prohibited fire season over areas that are public conservation land or additional land, Fire and Emergency will have regard to:

- Conservation values
- Public values
- Accessibility
- Fire risk conditions

Frequency of elevated fire danger

Weather stations in this area experience up to:

Fire danger	On average
Forest fire danger	6.3 days of extreme fire danger 5.5 days of very high fire danger
Grass fire danger	1 day of extreme fire danger 10 days of very high fire danger
Scrub fire danger	229 days of extreme fire danger 50 days of very high fire danger

Fire history

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

Year	Fire	Cause
2021	Rawene	Arson
2021	Pipiwai	Escaped rubbish fire
2021	Waipō Caves	Lawn mower fire
2020	Binnie Street, Paihia	Arson
2020	Ngati Hine Block, Ngapipitoa Road, Moerewa	Arson
2020	Ahipara fire, including mass evacuations	Arson
2020	Pipiwai	Unknown but suspicious
2020	Whangarei Dump	Spontaneous combustion
2019	Ramp Road, Karikari Peninsula Fire	Motor Vehicle Accident
2019	Tinopai	Escaped controlled burn
2019	Mangawhai Heads	Arson
2019	Oruawharo Road - Kaiwaka	Escaped unpermitted fire
2019	Tangowahine	Escaped unpermitted fire
2018	Te Paki Fire	Suspected carelessness (cigarette butt)
2017	Wrights Road, Titoki	Escaped rubbish fire
2014- '17	Pouto - Large scale fires over several years	Arson
2011	Horeke	Escaped rubbish fire

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 several 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 Northland

Northland has a strong focus on the reduction of fires within the district. Reduction activities are informed and enhanced through strong networks and relationships with our stakeholders. They are regularly engaged with to ensure our understanding of what the community values are aligned.

Fire and Emergency is mindful of the cultural and economic diversity of Northland and how fire is a major contributor to its cultural and economic fabric. This includes the use of cultural cooking fires, comfort fires, and the use of fire as a land management tool.

To mitigate risk in Northland, several specific functions and projects have been undertaken. These include:

- National Risk Reduction Strategy 2019-2029
- Changing all 'grapefruit' signs to detail the Fire Season instead of the fire danger
- Working with Department of Conservation, Councils, Police and Waka Kotahi NZ Transport Agency on the issues of abandoned cars
- Identifying and working with isolated communities and providing education in the safe disposal and/or recycling of domestic rubbish
- Having an appliance and fire crew attend tangi to allow hang, fires to be conducted safely during period of elevated fire danger
- Attending marae committee meetings to discuss issues associated with risk in both the built and natural environment
- Working with forest owners to reduce 'hot work' and the hours of work during high fire danger days
- Working with local council to encourage the 20-metre vegetation setback where possible
- Processing of water supply, vehicular access, vegetation mitigation for residential and commercial building resource consent applications.

Local contacts

Schedule of stakeholders

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

When we say...	What we mean is...
Consult while amending plan	You will have the opportunity for input into the fire plan before it is released for public consultation. Can include workshops and other opportunities to contribute.
Public consultation	You will have the opportunity to comment during the 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.

National-level stakeholders

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

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

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

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

Area-level and zone-level stakeholders

This list is for stakeholders who have an interest in the fire plan area or in specific zones. Fire and Emergency undertakes to consult as indicated for each zone's stakeholders.

Stakeholder	Fire plan development	Fire plan amendment	Changing fire season to prohibited	Section 52 fire prohibitions	Section 52 restrictions/prohibitions on activities
Bay of Islands Maritime Park Inc	Pilot feedback	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Department of Conservation	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	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
Dove Bay Community	Consulted while creating plan	Public Consultation	Notify via public channels	Notify via public channels	Notify via public channels
Far North District Council	Consulted while creating plan	Public Consultation	Notify via public channels	Notify via public channels	Notify via public channels
Far North Holdings	Consulted while creating plan	Public consultation	Notify via public channels	Direct contact	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
Forest Owners Association	Pilot Feedback	Public consultation	Notify via public channels	Direct contact	Notify via public channels
Hancock Forest Management	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Kaipara District Council	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
KiwiRail	Public consultation	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Local Advisory Committee	Consulted while creating plan	Public consultation	Notify via public channels	Direct contact	Notify via public channels

Stakeholder	Fire plan development	Fire plan amendment	Changing fire season to prohibited	Section 52 fire prohibitions	Section 52 restrictions/prohibitions on activities
Marsden Point Oil Refinery	Consulted while creating plan	Public consultation	Notify via public channels	Direct contact	Notify via public channels
Ministry of Primary Industries (MPI)	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
New Zealand Police	Consulted while creating plan	Public consultation	Notify via public channels	Direct contact	Notify via public channels
Waka Kotahi NZ Transport Agency	Consulted while creating plan	Public consultation	Notify via public channels	Direct contact	Notify via public channels
North Port	Public consultation	Public Consultation	Notify via public channels	Direct contact	Notify via public channels
North Power	Consulted while creating plan	Public Consultation	Notify via public channels	Direct contact	Notify via public channels
Northland Civil Defence Emergency Management (CDEM)	Consulted while creating plan	Public Consultation	Notify via public channels	Direct contact	Notify via public channels
Northland Inc (Chamber of Commerce)	Public consultation	Public consultation	Notify via public channels	Notify via normal channels	Notify via public channels
Northland Regional Council	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
Northland Wood Council	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
PF Olsen NZ	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

Stakeholder	Fire plan development	Fire plan amendment	Changing fire season to prohibited	Section 52 fire prohibitions	Section 52 restrictions/prohibitions on activities
Russell Landcare Trust	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
St John Ambulance	Consulted while creating plan	Public consultation	Notify via public channels	Direct contact	Notify via public channels
Summit Forests	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
New Zealand Carbon Farming	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Top Energy	Consulted while creating plan	Public consultation	Notify via public channels	Direct contact	Notify via public channels
Whangārei District Council	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Te Rūnanga o Ngāpuhi	Consulted while creating plan	Public consultation	Notify via public channels	Through Iwi Liaison Officer	Notify via public channels
Te Rūnanga o Whaingāroa	Consulted while creating plan	Public consultation	Notify via public channels	Through Iwi Liaison Officer	Notify via public channels
Te Rūnanga-a-Iwi o Ngāti Kahu	Consulted while creating plan	Public consultation	Notify via public channels	Through Iwi Liaison Officer	Notify via public channels
Kahukuraariki Trust	Consulted while creating plan	Public consultation	Notify via public channels	Through Iwi Liaison Officer	Notify via public channels
Ngāti Kurī Trust Board	Consulted while creating plan	Public consultation	Notify via public channels	Through Iwi Liaison Officer	Notify via public channels
Te Rūnanga Nui o Te Aupōuri Trust	Consulted while creating plan	Public consultation	Notify via public channels	Through Iwi Liaison Officer	Notify via public channels
Te Rūnanga o Te Rarawa	Consulted while creating plan	Public consultation	Notify via public channels	Through Iwi Liaison Officer	Notify via public channels
Te Roroa Whatu Ora Trust	Consulted while creating plan	Public consultation	Notify via public channels	Through Iwi Liaison Officer	Notify via public channels

Stakeholder	Fire plan development	Fire plan amendment	Changing fire season to prohibited	Section 52 fire prohibitions	Section 52 restrictions/prohibitions on activities
Patuharakeke Te Iwi Trust Board	Consulted while creating plan	Public consultation	Notify via public channels	Through Iwi Liaison Officer	Notify via public channels
Te Rūnanga o Ngāti Hine	Consulted while creating plan	Public consultation	Notify via public channels	Through Iwi Liaison Officer	Notify via public channels
Ngātiwai Trust	Consulted while creating plan	Public consultation	Notify via public channels	Through Iwi Liaison Officer	Notify via public channels
Te Rūnanga o Ngāti Whātua	Consulted while creating plan	Public consultation	Notify via public channels	Through Iwi Liaison Officer	Notify via public channels
Te Uri o Hau	Consulted while creating plan	Public consultation	Notify via public channels	Through Iwi Liaison Officer	Notify via public channels

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

Zone information

This section of the fire plan is for the separate zones in the local area where fire risk conditions can be different enough to need fire seasons and other restrictions applied separately. Some of the zones that are characteristically similar and/or in geographic proximity to each other have been gathered and described collectively as a group.

Depending on fire weather and conditions that are prevailing, it can be necessary to apply different fire seasons or restrictions in different parts of the group from time to time.

Each zone in the Northland Fire Plan Area has been described either individually or as a group of zones.

Muriwhenua Zone

Geography

The Southern boundary of Muriwhenua Zone extends from Herekino Harbour at Rangikohu Road along Kaitaia-Awaroa Road to Pukepoto Road, North Road, and State Highway 1 to Awanui. Then State Highway 10 to the Taipā Bridge. The coastline north to Cape Reinga and then south to Herekino Harbour completes the boundary.

Muriwhenua Zone equates to approximately (16 percent) of the total land mass of Northland and is part of the Far North District Territorial Authority. The zone extends from Cape Reinga in the north to the Herekino Harbour in the west, and Taipa on the east coast.

The zone is characterised by Ninety Mile Beach and Te Aupōuri and Karikari Peninsulas which are both tombolo - a deposition landform by which an island becomes attached to the mainland by a narrow piece of land such as a spit or bar. This results in very low-lying land with sandy soil and taller hills at the extremities which are quite exposed. There are swampy areas across the zone, accompanied by patches of peat and some small lakes. Three shallow harbours punctuate the east coast at the top middle and bottom.

There are large areas of production pine forest along the western side, dense manuka scrub mixed with gorse in the north and farmland from north to south. The dry and sandy soils are suitable for avocado farms which are common in the zone.

Demographics

At Fire and Emergency New Zealand, we have an in-depth knowledge of the demographics for each of the communities we serve. These demographics help us to understand the type of support each of our communities might need and how we communicate with them.

We use this knowledge in all aspects of our work, including our delivery of the 4Rs of emergency management and for fire control measures, such as declaring the beginning and end of fire seasons, prohibiting and restricting the use of fire, and issuing fire permits.

The district is sparsely populated with a permanent population of approximately 18,000. The population often doubles over the summer months for short periods of time which increases the risk of fire and the need to ensure casual visitors are informed of the fire season status and any restrictions in place.

Within the zone 56.7 percent of the population identify themselves as Māori, as opposed to the national average of 16.7 percent.

The population of this zone group has a high proportion of older people and young people. It is made of 22.1 percent under 15 years of age and 18.8 percent are over the age of 65.

The zone experiences some of the highest deprivation in New Zealand with a deprivation index of 8.2.

Many residents in this zone are without reticulated water supplies and are living off both the land and sea. Scrublands in Northland are valued as a habitat for pigs and goats which are a common food source.

Climate/weather

The climate in the Muriwhenua Zone is characterized by a temperate maritime influence due to its proximity to the ocean and is more heavily influenced by the El Niño-Southern Oscillation (ENSO) than most other parts of New Zealand.

This zone has a very strong coastal influence and unlike other parts of Northland it is not influenced by significant Hills. This means the zone:

- is subject to stronger winds than other parts of Northland due to the lack of hills to slow the wind down. Stronger winds increase drying rates and fire spread rates.
- has slightly higher humidity due to coastal influences from both sides meaning that the wind flows off the ocean most of the time. Higher humidity decreases fine fuels making ignition less easy and decreasing spread rates.
- has mild subtropical temperatures like other parts of Northland because of the coastal influence.
- has consistently low summer rainfall because high pressure systems frequently cover the upper north island. Rainfall varies between seasons here less than other parts of Northland because there is no rain shadow effect resulting from hills. This area also has lower mean fire season rainfall than other parts of Northland. This means the area is subject to significant drying most summers.

Land cover/land use

The Muriwhenua Zone is characterised by a lower proportion of high-producing exotic grassland land than the Northland average, with more mānuka and kānuka land and more exotic forest land. Mānuka, kānuka and exotic forest make up more than half of the land cover in the zone. There are large areas of production pine forest in this zone.

During the regeneration phase of each harvest cycle the forest reverts to scrub as gorse, Pampas grass and other high flammability species dominate the landscape, until they are overshadowed by the mature pines and die out.

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
Horticulture e.g.: avocado, viticulture farming • Pruning burn offs	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Forestry • Use of machinery – sparks • Relevant operations affected • Use of firebreaks	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Apiculture (beekeeping) • Use of smoke • Use of fire to destroy infested hives	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Primary production • Stubble burning, vegetation burn-off	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Tourism and recreation • People unfamiliar with local fire risk and rules • Access to locations may be restricted	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Tri-Board Mill Kaitāia • Impacted by restrictions on activities for suppliers	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Lifeline utilities/other infrastructure

Lifeline utility/ other infrastructure	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures
Electricity transmission lines • 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"/>
Top Energy - Electricity transmission lines • 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"/>
Telecommunications network and towers • Protect by applying controls to surrounding areas	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Recreational locations

- Public conservation land– all year restricted fire season
- Te Araroa Trail
- Te Paki Station
- Offshore Islands
- Forestry blocks
- Twin Coast Discovery Highway – localised road closures during fire suppression events which may impact traffic flows.

Note: During a prohibited fire season, the activities and/or access of campers, trampers and hunters can be impacted

Cultural and recreational activities and events

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

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

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

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

Activity and/or 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
Agricultural events and markets • Use of machinery - sparks	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Marae – hāngī and other cultural fires	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Ninety Mile Beach Snapper Classic	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Freedom camping	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Activity and/or events	Contributes to increased risk by of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected using fire control measures
Festivals, particularly held over multiple days with camping • Campfires • Increase in people without knowledge of fire risk or rules	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Fireworks • 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 • 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 • 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 • Campfires • Access restricted during high fire danger	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Beach fires	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<ul style="list-style-type: none"> • Campfires • Ecological values at risk 			

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
Public Conservation Land	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ahipara - fireworks ban under s.52	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Kaimaumau	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Karikari – fireworks ban under s.52	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Aupōuri Forest	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Kaimaumau Village (cutting fire breaks)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Three Kings	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Cape Reinga (Te Paki)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

The reason these areas are considered special risk areas are due to high fuel loading, peat, increased urban/rural interface, and high ecological and biodiversity values. It is often difficult to access areas for fire suppression.

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

Known fire hazards

This zone has no long-term fire hazards listed in the Fire Hazard Removal Case Management System; however we need to consider the presence of:

- Large tracts of volatile vegetation, including near residential property

Frequency of elevated fire danger

On average, based on Fire and Emergency New Zealand’s Fire Weather Station Climatology Data from the Aupōuri weather station, this Zone experiences:

- 5.9 days of very high forest fire danger
- 3.0 days of extreme forest fire danger
- 0.2 days of very extreme forest fire danger
- 40.2 days of very high scrub fire danger
- 104 days of extreme scrub fire danger
- 119 days of very extreme scrub fire danger

Fire history

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

Year	Fire	Cause
2023	Cape Reinga – Te Werahi Beach	Undetermined
2021-2022	Waiharara	Farm burn off out of control
2020	Ahipara fire, including mass evacuations	Arson
2019	Ramp Road, Karikari Peninsula Fire	Motor Vehicle Accident
2018	Te Paki Fire	Suspected Carelessness (cigarette butt)

Predominant fuel type

The fuel types in this zone are a combination of forest, grassland and highly flammable scrub. Much of the scrub is within high value public conservation land, and adjacent to residential properties and for this reason is very important in assessing the fire risk conditions. These scrublands consist of large quantities of fine fuels elevated above the ground that gain and lose moisture quickly – consequently the scrub fire danger can change from low, to extreme, within a day, at any time of year. Combined with the proximity of residential and commercial activities and large areas of production pine forest the risk of fire is considerably elevated.

Large areas of production pine forest are present along the western side of the peninsula. During the first 10 years of a harvest cycle, this type of forest can adopt similar characteristics to scrubland as fast-growing species like gorse and Pampas grass grow around the pines. The sandy soils though much of this zone are free draining are believed to result in faster drying of fuels than is represented by the indices.

Cape Reinga, Karikari Peninsula, Kaimaumau/Waiharara and Ahipara Tablelands all have extensive areas of scrubland. Pockets of scrub can be found all over the peninsula interspersed with forest and grassland.

Beef and sheep farming grasslands and avocado orchards are also widespread.

Thresholds

Fire seasons

Because of the complex fire environment in Muriwhenua Zone, a combination of threshold setting methodologies have been used.

Scrubland is the most volatile and unpredictable of the three fuel types present and poses the greatest fire risk in this zone. The procedure for setting triggers for changing fire seasons: scrub areas - was used to determine the lower threshold.

Lower Threshold Matrix: Open - Restricted

Scrub fire danger is Very High, Extreme or Very Extreme		
≤6 days per month	7-15 days per month	16+ days per month
Open	Restricted	Restricted

Using Fire and Emergency New Zealand's Fire Weather Station Climatology Data from the Aupōuri RAWs, July has the lowest monthly average number of days of Very High, Extreme or Very Extreme scrub fire danger at 16.1. This means elevated

fire risk conditions are common year-round including winter and for this reason, an Open Season will not be used for this zone. Fire and Emergency will discourage people burning near highly flammable scrublands without the conditions of a permit.

Changing fire seasons influences economic, cultural, and recreational activities. A Restricted Fire Season means that fire can still be used safely for many purposes including as a land management tool, with the guidance and support of Fire and Emergency through [Checkitsalright.nz](https://www.checkitsalright.nz) and the [Fire Permit System](#).

Fire permit assessors will closely consider applications to light a fire, taking special care in or near scrub fuels. When the fire danger thresholds are reached for forest and grassland fuel types, consideration will be made to change to prohibited fire season.

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 forest and grasslands as the predominant fuel types.

The national standard trigger points for grass and forest were considered, but a more cautious set of triggers has been selected for the following reasons:

- History of numerous large wildfires in the zone
- Free draining sandy soils cause moisture from precipitation to rapidly drain away meaning the fuels are likely to be dryer than indicated by the fire weather indices which will make fire suppression more difficult.
- The area frequently has higher wind speeds than other areas due to the low-lying terrain between the east and west coasts. The use of the national guide for customised thresholds based on the Aupōuri median wind speed supports the selected thresholds.
- The proximity to neighbouring vulnerable high value scrub-land areas

Upper Threshold Matrix: Restricted – Prohibited

Grass Curing (GC%)	Buildup Index (BUI)	
(%)	<50	>50
0-50	Restricted	Prohibited
50-80	Restricted	Prohibited
>80	Prohibited	Prohibited

Interpreting this matrix:

Restricted	Restricted fire season
Prohibited	Prohibited fire season

Prohibition on fires in open air (section 52)

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

Other local thresholds have not been set.

Prohibitions or restrictions on activities (section 52)

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

Forestry operations and access

We will consult with major forest owners on options for restricting or imposing additional conditions on forest access or activity when the Build-up Index (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 BUI reaches the above triggers, we will also consult with the forest owners and the transport authority regarding public access ways and roads through exotic forest plantation and other areas of risk.

Roadside mowing

Working with Councils, Waka Kotahi NZ Transport Agency, and KiwiRail around the scheduling of roadside and rail corridor vegetation spraying, and to reduce roadside mowing, during periods of high fire danger.

Mowing, ploughing or harrowing fields

There are no arrangements to limit this type of activity in place currently. When grass curing is higher than 80% combined with high winds speeds through the peak burning time of the day, the public are advised that these activities should be done either; earlier in the morning, or in the evenings when it is cooler.

Representative remote automated weather stations

The Remote Automated Weather Station (RAWS) at Aupōuri Peninsula and Ahipara, as well as the Cape Reinga Automated Weather Station (AWS) are used to determine whether the trigger thresholds have been met. An aggregated average of readings from the three weather stations will be calculated to produce one data set for input into the threshold matrix.

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

Muriwhenua Zone Map



Far North Zone Group

- Hokianga Zone
- Peria-Puketi Zone
- Whangaroa Zone
- Kaikohe Zone

Geography

This group of zones extends south from Te Aupōuri Zone boundary. The southern boundary of the group extends from the west coast at Waipoua River along the Far North District council boundary to State Highway 1, north to State Highway 11, then ending at Kawakawa River.

The Far North Group equates to approximately 33 percent of the total land mass of Northland and is the lower half of the Far North District. The group covers Kaitāia and Mangōnuī in the north, to Kaikohe in the centre and Kawakawa in the south.

The district is sparsely populated with a permanent population of approximately 50,000. There are large hills and ranges dissecting the group in a generally north to south direction.

Large areas of production pine forest, native forest and scrub are interspersed with arable and livestock farmland in the valleys and flat land surrounding the ranges.

The east coast is more heavily populated than the centre and west, with concentrations of people around the harbours and inlets.

The fire danger is less impacted by coastal climate conditions, as opposed to topography and wind funnelling in the zone.

The soil types are predominantly Northland brown clays, which are not as free draining as those in Te Aupōuri.

Demographics

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

The Bay of Islands communities, including Paihia, Kerikeri, and Russell, contain the highest population in the district, with Kerikeri being the largest town of 6,960. The next major town is Kaitāia with 5,870 inhabitants. Kaikohe, population 4,490, is the administrative centre of the district and is the third largest town.

The population doubles during summer months as visitors travel to coastal destinations. This increase in population increases the risk of fire over this period and there is a need to ensure casual visitors are informed of fire season status and any restrictions in place.

Over (47.4) percent of the population of this group of zones identify themselves as Māori compared to the National average of (16.7) percent.

The general population consists of 21.7 percent less than 15 years of age and 19 percent aged over 65.

This group experiences some of the highest deprivation in New Zealand with a deprivation index of 7.9. Communities have a high proportion of older people and young people.

Climate/weather

The climate in the Far North Zone Group is characterized by a temperate maritime influence due to its proximity to the ocean and is more heavily influenced by the El Niño-Southern Oscillation (ENSO) than most other parts of New Zealand.

During an El Niño event the Far North Zone Group typically experiences stronger or more frequent winds from the west combined with an elevated risk of drier-than-

normal conditions on the east coast in summer. Effects of this include increased soil moisture deficit and increased quantities of available fuel. The west experiences more rain than normal due to the barrier effect of the high elevation in the central ranges, causing orographic rainfall on the windward side. In winter, colder southerly winds tend to prevail, while in spring and autumn, southwesterlies tend to be stronger or more frequent, bringing a mix of the summer and winter effects. During particularly strong El Niño phases, these effects can be more intense.

La Niña events have the opposite effect. More north–easterly winds are characteristic, which tend to bring moist, rainy conditions to east leading to a ground water surplus above field capacity and less rain than average in the west. However, over-all across the group La Niña events bring more rain fall, leading to a ground water surplus above field capacity, less available fuel, and generally lower fire danger.

Central parts of the zone group can experience lower average winds speeds, and a narrower and more moderate range of rainfall readings. Temperatures can be higher in summer due to lower wind chill effect and insulation from the cooling effect of the ocean. During the summer season hot, fine weather will produce sea breezes in the afternoons along coastal areas, leading to a higher Initial Spread Index (ISI) which contributes to an increased fire danger and accelerated grass curing.

During an El Niño event the Far North Zone Group typically experiences stronger or more frequent winds from the west. The west experiences more rain than normal due to the barrier effect of the high elevation in the central ranges, causing orographic rainfall on the windward side. In winter, colder southerly winds tend to prevail, while in spring and autumn, southwesterlies tend to be stronger or more frequent, bringing a mix of the summer and winter effects. During particularly strong El Niño phases, these effects can be more intense.

La Niña events have the opposite effect. More north–easterly winds are characteristic, which tend to bring moist, rainy conditions to east and less rain than average in the west. However, over-all across the group La Niña events bring more rain fall, leading to a ground water surplus above field capacity, less available fuel, and generally lower fire danger.

Central parts of the zone group can experience lower average winds speeds, and a narrower and more moderate range of rainfall readings. Temperatures can be higher in summer due to lower wind chill effect and insulation from the cooling effect of the ocean.

During the summer season, hot fine weather will produce sea breezes in the afternoons along the coastal areas, leading to a higher Initial Spread Index (ISI) which contributes to an increased fire danger and accelerated grass curing.

Land cover/ land use

Large Public Conservation Land native forests make up part of the Far North Zone Group and generally occupy the steeper, more mountainous parts of the zone. Some of the largest being Puketi, Mataraua and Waipoua forests. Native forest generally has more low flammability species compared with exotic forests and therefore has a lower fire risk. Exotic production forests like pine are common. The scale tends to be smaller than other parts of New Zealand and it can be small private holdings, iwi owned or large corporate holdings.

Amongst the forests, beef and sheep farms make up another large percentage of the land use. Smaller lifestyle blocks are common on the eastern side surrounding the largest urban areas. There are 8 towns in the zone group with populations over 1000, of which Kerikeri is the largest (8,060). Urban land use is steadily growing, mostly on the eastern side of the island.

Arable farmland makes up a small percentage of land use, however this is increasing in recent years. Orchards are common, with avocado orchards becoming widespread and large in size, they are mostly located in the Bay of Islands area due to fertile volcanic soils and subterranean aquifers.

Scrubland is common across this zone group. An area to note is the inner Bay of Islands, surrounding Paihia, Ōpua, Waikare, and Russell where there are large areas of manuka and kānuka. This area has dense human. populations, and there are many dwellings located amongst this fuel type.

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
Horticulture e.g., kiwifruit, avocado, citrus, viticulture farming <ul style="list-style-type: none"> Pruning burn offs 	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Forestry <ul style="list-style-type: none"> Use of machinery – sparks Relevant operations affected Use of firebreaks 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Apiculture (beekeeping) <ul style="list-style-type: none"> Use of smoke Use of fire to destroy infested hives 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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"/>
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"/>
Juken Mill Kaitāia, and other domestic sawmills <ul style="list-style-type: none"> Impacted by restrictions on activities for suppliers 	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
AFFCO Moerewa	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ngāwhā Geothermal	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ngāwhā Correctional Facility	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Bay of Islands Airport <ul style="list-style-type: none"> Requirement for notification and permission for burns in flight path, under CAA rules Protected by own controls 	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

on use of fire and other activities in vicinity			
Bay of Islands Hospital <ul style="list-style-type: none"> Protect by applying controls to surrounding areas 	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Lifeline utilities/other infrastructure

Lifeline utility/ other infrastructure	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures
Top Energy - 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"/>
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"/>
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"/>
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"/>

Recreational locations

- Public conservation land
- Kawakawa steam train
- Te Araroa Trail
- Rail Trail Hōreke – Opuā
- Offshore islands
- Forestry blocks
- Waitangi Mountain Bike Park
- During a prohibited fire season, the activities and/or access for camping, tramping and hunting and other recreational users can be impacted.
- Twin Coast Discovery Highway – localised road closures during fire suppression events which may impact traffic flows.

Cultural and recreational activities and events

Tangata whenua have very strong ties to their whenua (land) and culture, and value being able to use their whenua without unnecessary restrictions. We will consult with tangata whenua and consider the needs of iwi when making decisions about implementing restrictions or prohibitions with our fire control powers. The relevant iwi for this zone are listed as stakeholders.

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

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

Cultural and recreational activities and events	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures
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"/>
Marae – hāngī and other cultural fires	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Freedom camping	<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 may be 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	<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
Public conservation land: <ul style="list-style-type: none"> • Ngāwhā • Opuā • Paihia • Waitangi • Inner Bay of Islands 	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Te Ruapekapeka Wāhi tapu	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The reason these areas are considered special risk areas are due to high fuel loading, large urban-rural interface, and high ecological and biodiversity values. It is often difficult to access areas for fire suppression.

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

Known fire hazards

This zone has no long-term fire hazards listed in the Fire Hazard Removal Case Management System; however we need to consider the presence of:

- Large tracts of volatile vegetation, including near residential property
- Undisclosed/legacy rubbish dumps
- Disused coal mines (Kawakawa)

Frequency of elevated fire danger

On average, based on Fire and Emergency New Zealand’s Fire Weather Station Climatology Data from the Kaikohe weather station, this Zone Group experiences:

- 1.1 days of very high forest fire danger
- 0.2 days of extreme forest fire danger
- 0 days of very extreme forest fire danger
- 53.3 days of very high scrub fire danger
- 96 days of extreme scrub fire danger
- 61.9 days of very extreme scrub fire danger

Fire history

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

Year	Fire	Cause
2021	Rawene	Arson
2020	Binnie Street, Paihia	Arson
2020	Ngāti Hine Block, Ngapipito Road, Moerewa	Arson
2011	Hōreke	Escaped rubbish fire

Predominant fuel type

This zone is a mixture of forestry and grasslands.

Thresholds

Fire seasons

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.

Use local table

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

Prohibition on fires in open air (section 52)

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

Other local thresholds have not been set.

Prohibitions or restrictions on activities (section 52)

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

Forestry operations and access

We will consult with major forest owners on options for restricting or imposing additional conditions on forest access or activity when the Buildup Index (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 BUI reaches the above triggers, we will also consult with the forest owners and the transport authority regarding public access ways and roads through exotic forest plantation and other areas of risk.

Roadside mowing

Working with Councils, Waka Kotahi NZ Transport Agency, and KiwiRail around the scheduling of roadside and rail corridor vegetation spraying, and to reduce roadside mowing, during periods of high fire danger.

Mowing, ploughing or harrowing fields

There are no arrangements to limit this type of activity in place currently. When grass curing is higher than 80% combined with high winds speeds through the peak burning time of the day, the public are advised that these activities should be done either; earlier in the morning, or in the evenings when it is cooler.

Advice is available through the [check it's alright](#) website for when to avoid certain activities that may be of risk for causing a wildfire. Noting these are voluntary restrictions it is envisaged the majority of public will follow this, where there is an elevated risk or public are not following this advice, imposing prohibitions or restrictions on activities is a tool available to us.

Representative remote automated weather stations

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

Whangaroa Zone

- Purerua AWS
- Waitangi RAWS

Peria-Puketi Zone

- Kaitaia Aero AWS
- Kaeo RAWS

Hokianga Zone

- Broadwood RAWS
- Hokianga 2 RAWS

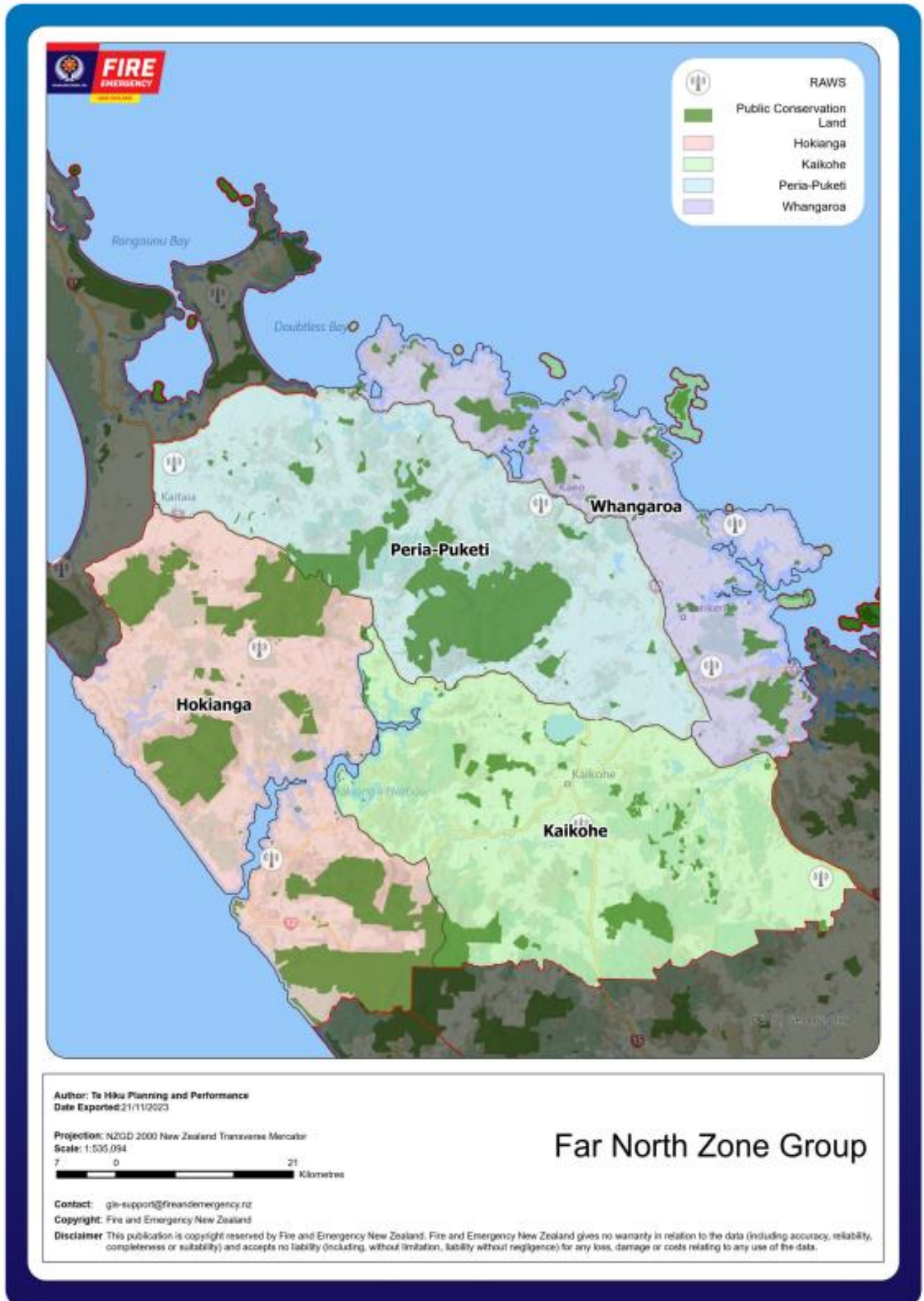
Kaikohe Zone

- Kaikohe RAWS
- Towai RAWS

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

DRAFT FOR CONSULTATION

Far North Zone Group Map



Whangarei Zone Group

- Tutukaka Zone
- Titoki Zone
- Waipu Zone

Geography

The Whangārei Zone Group makes up 22.6 percent of the Northland landmass (2,855 km²) but is home to half of the inhabitants.

Other urban areas of note include Ruākāka (pop. 2,880), One Tree Point (pop. 2,890), and Hikurangi (pop. 1,740). The population outside of urban Whangārei is spread across smaller towns and rural farms.

Tutukaka Zone forms a coastal band on the east coast. It is characterised by steep hills with numerous gorges and valleys near the coast which gradually subside further inland. It has a rugged coastline dispersed with sheltered bays in inlets.

Titoki Zone has some high hills in the north and west but is predominantly undulating and fertile land suitable for farming. The Wairua, Mangakahia Rivers converge and form the Wairoa River which flows to the Kaipara Harbour. These rivers dominate the zone with flood plains and low hills surrounding them. This system forms a very large catchment area which can cause flooding at times. Another notable feature is the Tangihua Range in the south of the zone which rises out of an area that is otherwise low hills or flood plain.

Waipu Zone forms a band roughly 15 kilometres wide on the east coast between Whangarei and Mangawhai Harbours. It has a mixture of undulating with land and some areas of higher hills including the Brynderwyns which reach 450 metres. Karst limestone features in the area forming cave systems as well as an aquifer consisting of alluvial deposits and basalt bedrock. The beach in Bream Bay extends 23 kilometres from Marsden Point to Waipu Cove, broken only by Ruakaka and Waipu River mouths.

Mangawhai is a significant area for the zone group with an urban population of around 3,000, is Northlands fastest growing area and experiences substantial population increases during weekends, and over the summer months.

Demographics

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

The Whangārei Zone Group has a resident population of Just over 100,000. Nearly half of that reside in the main city of Whangarei.

Māori comprise 30 percent of the population of the Whangārei Zone Group, as opposed to the national average of 16.7 percent.

Over 21 percent of the population is under 15 years old, and 18.9 percent are over the age of 65.

Central Whangārei is the most densely populated part of the zone group, and it also scores high on the national deprivation index with most meshblocks scoring between 8 and 10. Rural areas surrounding the city tend to have the lowest scores, with scores rising with distance from the city. Small pockets of low scores exist in some coastal areas.

The Whangārei District Council estimates a 300 percent population increase over the summer holiday break along the Whangārei coast. Some area populations grow as much as 10–20 times their usual size. Hotspot areas include Bland Bay/Whangaruru, Ōakura, Matapouri, Pātaua, and Waipū Cove/Langs Beach.

This influx of visitors can create added fire risk due to human behaviours while on holiday or people who are unaware of the risks of fire in less urban settings.

The urbanised area of Ruākāka and One Tree Point were intended to act as a satellite for Whangārei but is becoming established as a thriving hub. Growth that was initially led by the needs of Marsden Point Refinery is now driven by the area becoming a popular choice as a lifestyle residence. \

Climate/weather

The climate in the Whangarei Zone Group is characterized by a temperate maritime influence due to its proximity to the ocean and is heavily influenced by the El Niño-Southern Oscillation (ENSO).

During an El Niño event the Whangarei Zone Group typically experiences an elevated risk of drier-than-normal conditions on the east coast in summer. Effects of this include increased soil moisture deficit and increased quantities of available fuel. The western part of the zone group is centrally located on the island making it more isolated from the maritime conditions that exist on the eastern side of the zone group. Wind speeds here can be reduced due to frictional effects as air moves over the land surface. Orographic rainfall on the west coast can mean lower rainfall readings in the central and eastern part of the island. In winter, colder southerly winds tend to prevail, while in spring and autumn, southwesterlies tend to be stronger or more frequent, bringing a mix of the summer and winter effects.

La Niña events have the opposite effect. More north–easterly winds are characteristic, which tend to bring moist, rainy conditions to the east, and less rain than average in the west. However, over-all across the group La Niña events bring more rain fall, leading to a ground water surplus above field capacity, less available fuel, and generally lower fire danger.

Central parts of the zone group can experience lower average winds speeds, and a narrower and more moderate range of rainfall readings. Temperatures can be higher in summer due to lower wind chill effect and insulation from the cooling effect of the ocean.

During the summer season hot, fine weather will produce sea breezes in the afternoons along coastal areas, leading to a higher Initial Spread Index (ISI) which contributes to an increased fire danger and accelerated grass curing.

Land cover/ land use

The largest land cover type in the Whangarei Zone group is high production exotic grassland. The more mountainous parts tend to be forested, with the majority being in the northern and eastern parts.

Exotic production forests are more common than indigenous forests except in the north-eastern corner and along the Tutukaka coast. Russell Forest, which is indigenous forest, is the largest forest in the zone group and it is also surrounded by vast areas of manuka and kanuka.

A feature common across the zone group is an abundance of small pockets of indigenous forest. These are often part of small land holdings which are highly valued high by their owners.

Fertile volcanic soils and subterranean aquifers in areas surrounding Whangarei foster a high density of orchards, vineyards, or other perennial crops.

By far the largest area of urban land use in the zone group is Whangarei, with 27.2% of Northlands population, followed by the Ruakaka/One Tree Point area and Dargaville with 2.8% and 2.6% respectively.

Industry

Industry	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures
Primary production, including horticulture and agriculture <ul style="list-style-type: none"> • 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"/>
Forestry <ul style="list-style-type: none"> • use of machinery – sparks • relevant operations affected • Use of firebreaks 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Apiculture (beekeeping) <ul style="list-style-type: none"> • Use of smoke • Use of fire to destroy infested hives 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Domestic sawmills <ul style="list-style-type: none"> • Impacted by restrictions on activities for suppliers 	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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"/>
Horticulture e.g.: kiwifruit, avocado, viticulture farming <ul style="list-style-type: none"> • Pruning burn-offs 		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Lifeline utilities/other infrastructure

Lifeline utility/ other infrastructure	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures
Electricity transmission lines <ul style="list-style-type: none"> • 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"/>
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"/>
Roothing network <ul style="list-style-type: none"> • Sparks from vehicle malfunction, discarded cigarettes 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

<ul style="list-style-type: none"> Spark causing activities during road maintenance and mowing 			
Natural gas distribution network <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"/>
Telecommunications network <ul style="list-style-type: none"> Protect by applying controls to surrounding areas 	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Recreational locations

- Public conservation land
- Te Araroa Trail
- Offshore Islands
- Parahaki Mountain Bike Track
- Forestry blocks
- Glenbervie Adventure Park
- Heads Up Adventures Whangārei
- During a prohibited fire season, the activities and/or access for camping, tramping and hunting and other recreational users can be impacted.
- Twin Coast Discovery Highway – localised road closures during fire suppression events which may impact traffic flows.

Cultural and recreational activities and events

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

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

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

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

Cultural and recreational activities and events	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures
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"/>
Marae – hāngī and other cultural fires	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Freedom camping	<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"/>

<p>Fireworks</p> <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"/>
<p>Horse riding, mountain biking</p> <ul style="list-style-type: none"> • Access restricted during high fire danger 	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Motorsports e.g., rally, 4WD and dirt biking</p> <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"/>
<p>Hunting, camping, hiking, or tramping</p> <ul style="list-style-type: none"> • Campfires • Access may be restricted during high fire danger 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Beach fires</p> <ul style="list-style-type: none"> • Campfires <p>Ecological values at risk</p>	<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
Public conservation land	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Offshore islands	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Matakohe-Limestone Island	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The reason these areas are considered special risk areas are due to high fuel loading, large urban-rural interface, and high ecological and biodiversity values. It is often difficult to access areas for fire suppression.

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

Known fire hazards

This zone has no long-term fire hazards listed in the Fire Hazard Removal Case Management System; however we need to consider the presence of:

- Large tracts of volatile vegetation, including near residential property
- Undisclosed/legacy rubbish dumps
- Disused coal mines (Hikurangi and Kamo)

Frequency of elevated fire danger

On average, based on Fire and Emergency New Zealand’s Fire Weather Station Climatology Data from the Whangarei Aero weather station, this Zone Group experiences:

- 5.2 days of very high forest fire danger
- 1.9 days of extreme forest fire danger

- 0.1 days of very extreme forest fire danger
- 50.1 days of very high scrub fire danger
- 94.3 days of extreme scrub fire danger
- 105 days of very extreme scrub fire danger

Fire history

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

Year	Fire	Cause
2021	Pipīwai	Escaped rubbish fire
2021	Waipū Caves	Lawn mower fire
2020	Pipīwai	Unknown but suspicious
2020	Whangārei Dump	Spontaneous combustion
2017	Wrights Road, Titoki	Escaped rubbish fire

Predominant fuel type

This zone is a mixture of forestry and grasslands.

Thresholds

Fire seasons

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

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

Prohibition on fires in open air (section 52)

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

Other local thresholds have not been set.

Prohibitions or restrictions on activities (section 52)

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

Advice is available through check it's alright for when to avoid certain activities that may be of risk for causing a wildfire. Noting these are voluntary restrictions it is envisaged the majority of public will follow this, where there is an elevated risk or public are not following this advice, imposing prohibitions or restrictions on activities is a tool available to us.

Forestry operations and access

We will consult with major forest owners on options for restricting or imposing additional conditions on forest access or activity when the Buildup Index (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 BUI reaches the above triggers, we will also consult with the forest owners and the transport authority regarding public access ways and roads through exotic forest plantation and other areas of risk.

Roadside mowing

Working with Councils, Waka Kotahi NZ Transport Agency, and KiwiRail around the scheduling of roadside and rail corridor vegetation spraying, and to reduce roadside mowing, during periods of high fire danger.

Mowing, ploughing or harrowing fields

There are no arrangements to limit this type of activity in place currently. When grass curing is higher than 80% combined with high winds speeds through the peak burning time of the day, the public are advised that these activities should be done either; 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 in the Whangarei Zone Group are:

Tutukaka Zone

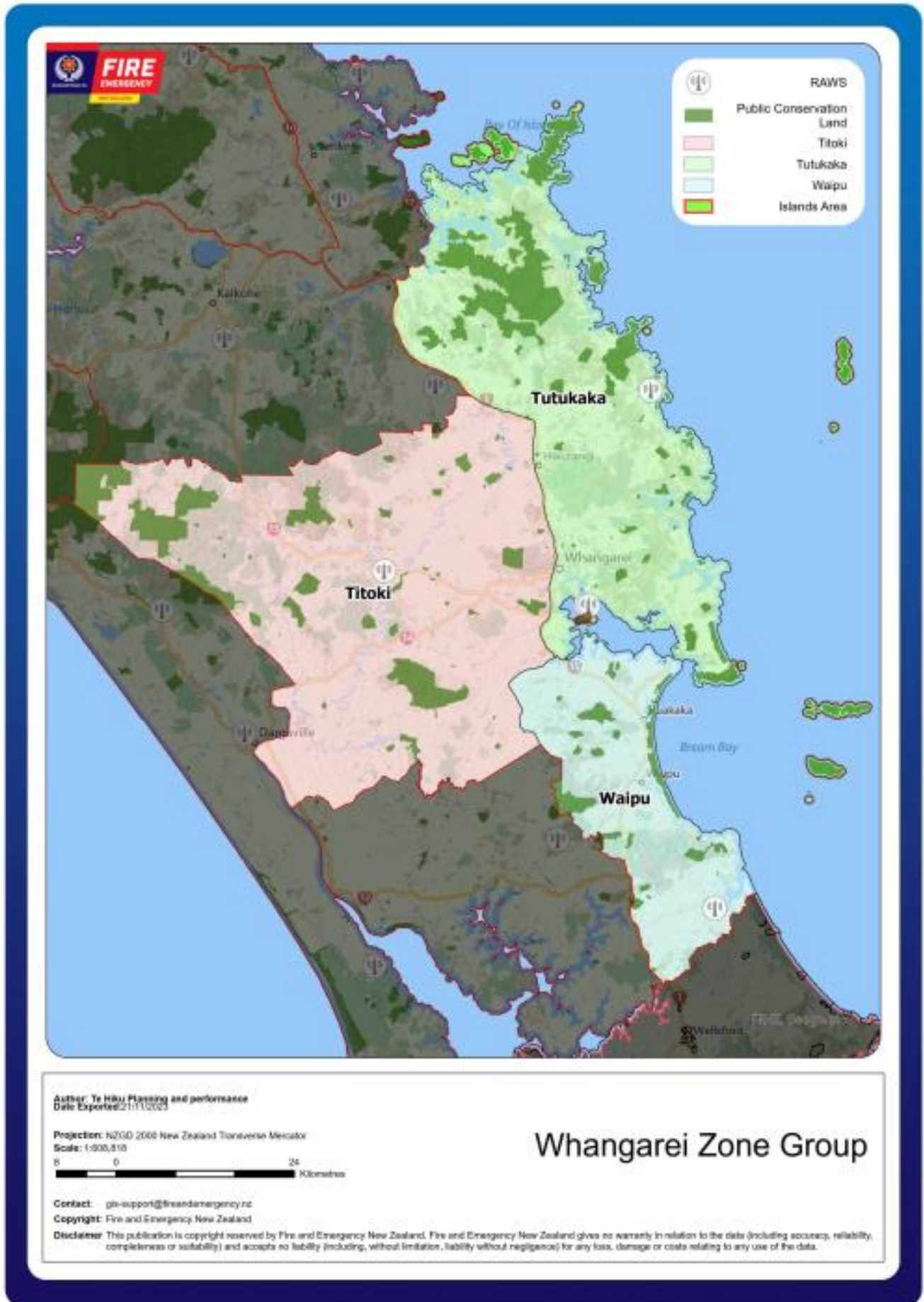
- Whananaki RAWS
- Whangarei Aero AWS

Titoki Zone

- Mangakahia
- Waipu Zone
- Whangarei Aero AWS
- Mangawhai RAWS

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

Whangarei Zone Map



Kaipara Zone Group

- Paparoa Zone
- Ripiro Zone

Geography

The Kaipara Zone Group has 24.6 percent of Northland’s landmass (3,109 km²) and is located in the rolling hills around the northern shores of the Kaipara Harbour, a large natural harbour open to the Tasman Sea.

Paparoa Zone surrounds the north-eastern reaches of the Kaipara Harbour with the two main towns being Maungaturoto and Paparoa. Low hills and valleys with fertile volcanic and alluvial soils support a strong farming community. The rivers on the northern side of the zone drain northward into the Wairoa River system before completing a loop to end up back in the Kaipara Harbour.

The western boundary is defined by Ripiro Beach which stretches down Northland’s west coast from Maunganui Bluff and the Waipoua Forest in the north, to Pouto at the entrance to the Kaipara Harbour. It creates a coastal barrier to the northern side of the Kaipara Harbour and is formed from consolidated sand dunes. At the northern end the sandy soil makes way to areas with a thin covering over the greywacke basement rock.

The Zone Group is bisected by the lower reaches of the Wairoa River, which flows into the northern end of the Kaipara Harbour.

Demographics

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

The Kaipara Zone Group has a residential population of 24,100. Dargaville is the district’s largest town, with a population of 5,240.

Approximately 25.5 percent of the Zone Group population identify themselves as Māori, compared to the national average of 16.7 percent.

The Kaipara Zone Group population consists of 19.4 percent under 15 years old and 21.2 percent are over 65.

The Kaipara Zone Group experiences significantly more deprivation than the New Zealand average, with a high proportion of older people in the communities within the fire zone. Kaipara Zone has a deprivation index of 7.0.

Climate/weather

During an El Niño event the Kaipara Zone Group typically experiences stronger or more frequent winds from the west.

The west experiences more rain than during a La Niña event due to the barrier effect of the high elevation in the central ranges, causing orographic rainfall on the windward side. In winter, colder southerly winds tend to prevail, while in spring and autumn, southwesterlies tend to be stronger or more frequent, bringing a mix of the summer and winter effects. During particularly strong El Niño phases, these effects can be more intense.

La Niña events have the opposite effect. More north–easterly winds are characteristic, which tend to bring moist, rainy conditions to east and less rain than average in the west. However, over-all across the zone group La Niña events bring more rain fall, leading to a ground water surplus at or above Field Capacity, less available fuel, and generally lower fire danger.

Central parts of the Zone Group can experience lower average winds speeds, and a narrower and more moderate range of rainfall readings. Temperatures can be

higher in summer due to lower wind chill effect and insulation from the cooling effect of the ocean.

During the summer season hot, fine weather will produce sea breezes in the afternoons along coastal areas, leading to a higher Initial Spread Index (ISI) which contributes to an increased fire danger and accelerated grass curing.

The general climate of the Kaipara Zone is like that of Far North and Whangārei Zone Groups however the zones have been separated because the actual weather at the time can be significantly different depending on where it has come from.

Land cover/ land use

High-producing exotic grassland dominates the Kaipara Zone Group, making up almost two thirds of land cover. The west coast also has areas of low producing grassland, where soils are less fertile, poorly drained, and acidic. The proportion of exotic forest areas are similar to the rest of Northland, however there is a lower proportion of other types of forest land cover in the Kaipara Zone.

Large production forests occupy the northern and southern ends of Ripiro Zone, while Paparoa Zone has an abundance of small holding exotic forests as part of investment portfolios for farms.

Alluvial soils, combined with subterranean aquifers along either side of the lower Wairoa River support short-rotation croplands. Ruawai in particular is known for high kumara production.

The southern ends of both the Pouto and Tinopai Peninsulas have large areas of scrubland dispersed with exotic forest and grassland.

Industry

Industry	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures
Primary production, including horticulture and agriculture <ul style="list-style-type: none"> • use of machinery – sparks • use of fire for land management • Pruning burn-offs • relevant operations affected 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Forestry <ul style="list-style-type: none"> • use of machinery – sparks • relevant operations affected • Use of firebreaks 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Apiculture (beekeeping) <ul style="list-style-type: none"> • Use of smoke • Use of fire to destroy infested hives • Impacted by restrictions on activities for suppliers 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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"/>

	Domestic sawmills Impacted by restrictions on activities for suppliers		<input checked="" type="checkbox"/>	
Lifeline utilities/other infrastructure	Lifeline utility/ other infrastructure	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures
	Electricity transmission lines <ul style="list-style-type: none"> • 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"/>
	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"/>
	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"/>
	Natural gas distribution network <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"/>
	Telecommunications network <ul style="list-style-type: none"> • Protect by applying controls to surrounding areas 	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Recreational locations

- Public conservation land
- Te Araroa Trail
- Forestry blocks
- Dargaville Rail Carting Tours
- Waipoua Forest
- Trounson Kauri Park
- Twin Coast Discovery Highway – localised road closures during fire suppression
- events which may impact traffic flows.

During a prohibited fire season, the activities and/or access for camping, tramping and hunting and other recreational users can be impacted.

Cultural and recreational activities and events

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

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

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

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

Cultural and recreational activities and events	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures
Agricultural events and markets • Use of machinery - sparks	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Marae – hāngī and other cultural fires	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Freedom camping	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Festivals, particularly held over multiple days with camping • Campfires • Increase in people without knowledge of fire risk or rules	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Fireworks • 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 • 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 • 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 • Campfires • Access may be restricted during high fire danger • Hunters singeing pigs • Use of off-road vehicles – hot exhausts in long grass	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Beach fires • 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
Public conservation land	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Waipoua Forest	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Offshore islands	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Pouto Peninsula	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

The reason these areas are considered special risk areas are due to high fuel loading, large urban-rural interface, and high ecological and biodiversity values. It is often difficult to access areas for fire suppression.

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

Known fire hazards

This zone has no long-term fire hazards listed in the Fire Hazard Removal Case Management System; however we need to consider the presence of:

- Large tracts of volatile vegetation, including near residential property
- Undisclosed/legacy rubbish dumps

Frequency of elevated fire danger

On average, based on Fire and Emergency New Zealand’s Fire Weather Station Climatology Data from the Dargaville weather station, this Zone Group experiences:

- 4.4 days of very high forest fire danger
- 2.2 days of extreme forest fire danger
- 0.1 days of very extreme forest fire danger
- 48.8 days of very high scrub fire danger
- 91.6 days of extreme scrub fire danger
- 95.4 days of very extreme scrub fire danger

Fire history

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

Year	Fire	Cause
2019	Tinopai	Escaped controlled burn
2019	Mangawhai Heads	Arson
2019	Oruawharo Road – Kaiwaka	Escaped unpermitted fire
2019	Tangowahine	Escaped unpermitted fire
	Pouto – Large scale fires over several years	Arson

Predominant fuel type

The predominant fuel type in this zone is forestry and grasslands

Thresholds

Fire seasons

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

Use local table

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

Prohibition on fires in open air (section 52)

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

Other local thresholds have not been set.

Prohibitions or restrictions on activities (section 52)

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

Advice is available through check it's alright for when to avoid certain activities that may be of risk for causing a wildfire. Noting these are voluntary restrictions it is envisaged the majority of public will follow this, where there is an elevated risk or public are not following this advice, imposing prohibitions or restrictions on activities is a tool available to us.

Forestry operations and access

We will consult with major forest owners on options for restricting or imposing additional conditions on forest access or activity when the Buildup Index (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 BUI reaches the above triggers, we will also consult with the forest owners and the transport authority regarding public access ways and roads through exotic forest plantation and other areas of risk.

Roadside mowing

Working with Councils, Waka Kotahi NZ Transport Agency, and KiwiRail around the scheduling of roadside and rail corridor vegetation spraying, and to reduce roadside mowing, during periods of high fire danger.

Mowing, ploughing or harrowing fields

There are no arrangements to limit this type of activity in place currently. When grass curing is higher than 80% combined with high winds speeds through the peak burning time of the day, the public are advised that these activities should be done either; 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 have reached the trigger thresholds in the Kaipara Zone Group are Ripiro Zone

- Trounson (currently called Opouteke 2) RAWS
- Dargaville 2 AWS
- Pouto RAWS

Paparoa Zone

- Brynderwyn RAWS

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

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Kaipara Zone Group Map



Islands Zone

Geography

The Islands Zone features offshore islands located along the whole coastline of Northland.

The Three Kings Islands/Manawatāwhi island group which lies 56 kilometres northwest of Cape Reinga and is Public Conservation Land (PCL), with no unauthorised landing permitted.

An unusual feature of Manawatāwhi Islands is they are an immediate part of New Zealand, but not part of any region or district, instead an *Area Outside Territorial Authority*.

The biodiversity and cultural values for these islands are very high. There are critically endangered species present, and they are tapu/sacred as they form an important part of wairua/spirituality for Māori. Many other islands in Northland are similar in this respect.

Almost all of Northland's islands are on the east coast and extend over 350 kilometres from Manawatāwhi/Three Kings in the north to Tuturu/Sail Rock off Bream Bay in the south.

Islands are inherently difficult to access, which makes fire control a challenge. This factor contributes to the reason that the Islands Zone only includes islands that have no road access – some islands in the Northland Fire Plan Area have a causeway connecting to the mainland which allows for vehicle access.

Many of the smaller islands are steep and rocky with little vegetation growing on them, posing low fire danger. The larger islands tend to have better access from beaches and have a mixture of vegetation – grass, manuka scrub, indigenous forest. While they are less steep than the smaller rocky islets, moderately steep terrain is a common trait of most of the larger islands.

Demographics

The total number of people living in the Islands Zone is very low, with few permanent residents. The only permanently inhabited islands are Moturoa, Moturua, Motuarohia and Tāwiriwiri Island in the Bay of Islands, Wairau/Milford Island in Whangaroa Harbour and Motukauri in Whangaruru Harbour.

In this zone a higher than average number of the population identify themselves as Māori, as opposed to the national average of 16.7 percent.

The population of this zone group has a higher than national average proportion of people over the age of 65.

On the islands that are PCL, some, mostly in the Bay of Islands and the Cavalli Islands, visitors may land and spend the day. Two have provision for overnight stays in a DoC hut or camping, but on many others landing is not permitted at all.

Historical data shows most visitors to islands follow any fire restrictions that may be in place, while a small number display less risk-averse behaviours including lighting fires.

Discussions with private landowners have shown they have similar values regarding conservation and fire safety as the Department of Conservation.

Climate/weather

Offshore islands tend to be quite exposed which can allow for high wind speeds. Afternoon sea breezes commonly affect the islands during the summer months.

They can also receive less orographic rainfall than the mainland causing drier conditions. This combined with windier conditions means the drying of fuels can be accelerated on islands.

The moderating effect of the sea temperature can keep air temperature cooler during summer and warmer during winter. Daily too, the high afternoon temperatures experienced inland during summer can be less extreme in the Islands Zone.

Relative humidity (RH) can be higher in the Islands Zone due to evaporation of the sea water surrounding the islands which is more like the coastal areas of the mainland than the interior.

An important indicator that extreme fire behaviour will occur if a fire becomes out of control, is termed 'cross-over'. This happens when air temperature and relative humidity readings are the same, at which time extreme caution should be taken to avoid the outbreak of fire. Because of the moderating effect of temperature and higher RH mentioned above, cross-over can be less common in this zone.

**Land cover/
land use**

Many of the islands are largely covered in regenerating manuka. Some of the southern islands are forested and others in the central part of the zone have large areas of grass but on balance the predominant fuel type in this zone is manuka scrub.

The land use is predominantly Public Conservation Land which consists of various types of reserves, including – nature, recreation, scientific, historic and scenic reserves.

A small number of islands are privately owned and are either used for farming or residential. There are two islands that are partly privately owned and partly Public Conservation Land.

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
Apiculture (beekeeping) <ul style="list-style-type: none"> Use of smoke Use of fire to destroy infested hives Impacted by restrictions on activities for suppliers 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Lifeline utilities/other infrastructure

There are no lifelines or utilities of note in these locations

Recreational locations

Recreational locations that may be affected by Fire and Emergency exercising its fire control powers.

Access to islands may be restricted if extreme fire weather is present - Motuarohia, Moturua, Urupukapuka, Waewaetorea Islands, Okahu Island, Motukawanui, Rimariki Islands

Cultural and recreational activities and events

Many of the islands have high cultural, ecological and biodiversity value.

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

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

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

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

Cultural and recreational activities and events	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using of fire control measures
Cultural cooking, e.g. Hāngī	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Fireworks <ul style="list-style-type: none"> • Use may be prohibited during high fire danger • Pyrotechnics managed by other approvals • May consider prohibition near islands for fire control 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Camping, sight-seeing <ul style="list-style-type: none"> • Campfires • Access may be restricted during high fire danger 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Hiking, back country running <ul style="list-style-type: none"> • Access may be restricted during high fire danger 	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Campfires <ul style="list-style-type: none"> • Increase in people without knowledge of fire risk or rules 	<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 of fire control measures
Public conservation land <ul style="list-style-type: none"> • Ecological and biodiversity values at risk • In own zone to apply separate controls • DoC does not allow fires at any time on PCL islands 	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Known fire hazards

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

Frequency of elevated fire danger

Due to the geographic isolation of this zones islands, and their placement within other groups of RAWs zones, it is not possible to determine the exact number of days as a group, refer to the other zone where these islands are located.

Fire history

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

Year	Fire	Cause
2021	Manawatāwhi/ Three Kings	Suspected fireworks
2019	Moturua	Fireworks
1983	Moturua	Pyrotechnics

Predominant fuel type

Many of the islands are largely covered in regenerating manuka. Some of the southern islands however, are forested and others in the central part of the zone have large areas of grass. But, on the balance of things the predominant fuel type in this zone is scrub.

Thresholds**Fire seasons**

The national standard trigger points for grass and forest were considered for this zone, but a more cautious set of triggers has been selected for the following reasons:

- Islands frequently have higher wind speeds than other areas due to the exposed coastal locations.
- High cultural, ecological and biodiversity values.
- Islands are difficult to access, which makes fire control difficult.
- Historical data showing less risk-averse human behaviours by visitors to islands in regard to fire.

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 scrub and grasslands as the predominant fuel types.

Use local table

Grass Curing (GC%) (%)	Buildup Index (BUI)		
	0–25	25–50	> 50
0–50	Restricted	Restricted	Prohibited
50–70	Restricted	Restricted	Prohibited
>70	Prohibited	Prohibited	Prohibited

Interpreting this matrix:

Open	Open fire season
Restricted	Restricted fire season
Prohibited	Prohibited fire season

Prohibition on fires in open air (section 52)

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

Other local thresholds have not been set.

Prohibitions or restrictions on activities (section 52)

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

Advice is available through check it's alright for when to avoid certain activities that may be of risk for causing a wildfire. Noting these are voluntary restrictions it is envisaged the majority of public will follow this, where there is an elevated risk or public are not following this advice, imposing prohibitions or restrictions on activities is a tool available to us.

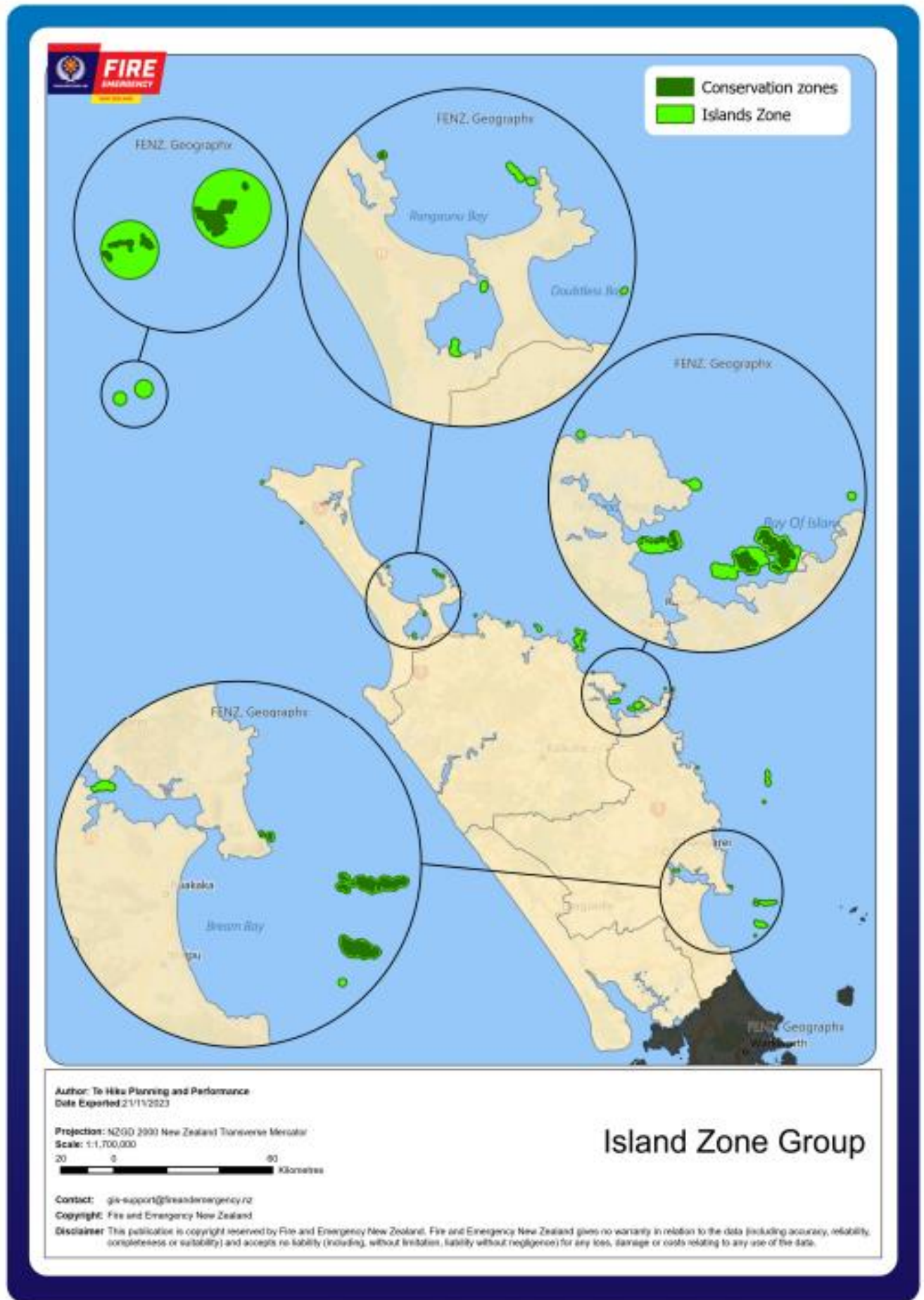
Representative remote automated weather stations

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

- Cape Reinga AWS
- Kaikohe RAWS
- Whangarei Aero AWS

This zone uses the scrubland fuel type method to determine the trigger points to change fire seasons. This method requires historic climatological data to inform the calculations. There are no weather stations located in the Islands Zone. The weather stations listed above are the nearest RAWS to the Islands Zone that have data recorded over a long enough period to build a picture of average climate.

Islands Zone Map



Public Conservation Land

Geography

Department of Conservation manages public conservation land throughout the fire plan area. Public conservation lands are shown on all of the maps for this fire plan area

Special risk areas

Public conservation land has significant ecological and biodiversity values

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
Offshore islands	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Waipoua Forest, including Tāne Mahuta	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Kaimaumau Wetland	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ahipara Gumfields Historic Reserve	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Te Rerenga Wairua/Cape Reinga	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Known fire hazards

There are no fire hazards listed in the Fire Hazard Removal Case Management System within public conservation land.

Fire history

Fire history of public conservation land in the fire plan area has not been provided.

Year-round restrictions and prohibitions

The Department of Conservation has a policy of no fires within the Northland conservation estate. This policy was enforced previously through a restricted or prohibited fire season being imposed on all conservation land within the Northland region.

The reason for this elevated fire control was due to the significant ecological and biodiversity values and the difficulty of accessing some areas for fire suppression activity.

Fire and Emergency 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, we have agreed that these fire control measures will continue under the Fire and Emergency Act 2017 for Fire Plan Area Northland. All current and future fire season change notifications within Fire Plan Area Northland will reference this agreement and Fire and Emergency will erect signage to reflect this agreement.

Public conservation lands that are not islands will remain in a restricted fire season year-round unless they are in a prohibited fire season. Even when the surrounding zone goes to an open fire season, public conservation land will remain in a restricted fire season.

Public conservation lands that are an island or part of an island will remain in a prohibited fire season year-round – that is, 365 days per year. Even when adjacent land on the same island changes to restricted fire season, public conservation land will remain in a prohibited fire season.

NZ Defence Force

No 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.

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

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