

Fire Plan for Northland, Te Hiku

2021 – 2024



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Status of this document

This document is issued by Fire and Emergency New Zealand.

Recommendations for change

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

Requests or recommendations for changes to this material should be sent to Region Manager, Te Hiku.

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Approval

Full Name: Ron Devlin

Title: Region Manager, Te Hiku

Date: 27 July 2021



Signature

Introduction

How to use this document

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

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

Why do we have fire plans?

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

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

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

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

Content of the fire plans

Fire plans must:

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

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

A fire plan must be consistent with:

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

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

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

Local area and zones

Local area

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

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

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

Zones

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

Consultation

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

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

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

Key stakeholders

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

Review and amendment

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

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

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

4 Rs of emergency management

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

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

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



Reduction

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

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

For Fire and Emergency, this work includes:

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

Readiness

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

For Fire and Emergency, this includes:

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

Response

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

For Fire and Emergency, this includes:

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

It can also include responding to:

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

Recovery

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

For Fire and Emergency, this includes:

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

Our commitment to working with Māori as tangata whenua

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

We recognise:

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

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

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

National Framework for Fire Control

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

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

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

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

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

Our policies

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

Policy	Detail
Fire seasons, prohibitions and restrictions policy	Relating to sections 52 to 58 of the Act and decisions to: <ul style="list-style-type: none"> • 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.

Policy	Detail
Fire permitting policy	Supporting the policy above and also defining actions for: <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	Relating to sections 65 to 67 of the Act and decisions about what to do when: <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.
Compliance and enforcement policy	Covering how we monitor and take action to identify and influence landowners and others to comply with the requirements of the Act and other relevant legislation. This covers activities which: <ul style="list-style-type: none"> • 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.

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

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

Fire risk conditions

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

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

We also take these into account when setting fire seasons.

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

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

Condition	Description
Fire weather science	The NZ Fire Danger Rating System includes measures, such as: <ul style="list-style-type: none"> • 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 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.
Ability to provide an effective response	Factors that contribute to our ability to respond to an out of control fire include: <ul style="list-style-type: none"> • availability of response resources, i.e. people and equipment • isolation • accessibility issues • availability of water supplies.

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

Fire seasons

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

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

Fire seasons are applied to geographic zones based on:

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

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

Open fire season



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

Restricted fire season



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

Prohibited fire season



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

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

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

Open fire seasons

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

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

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

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

Restricted fire seasons

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

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

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

Prohibited fire seasons

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

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

Trigger thresholds for changing fire seasons

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

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

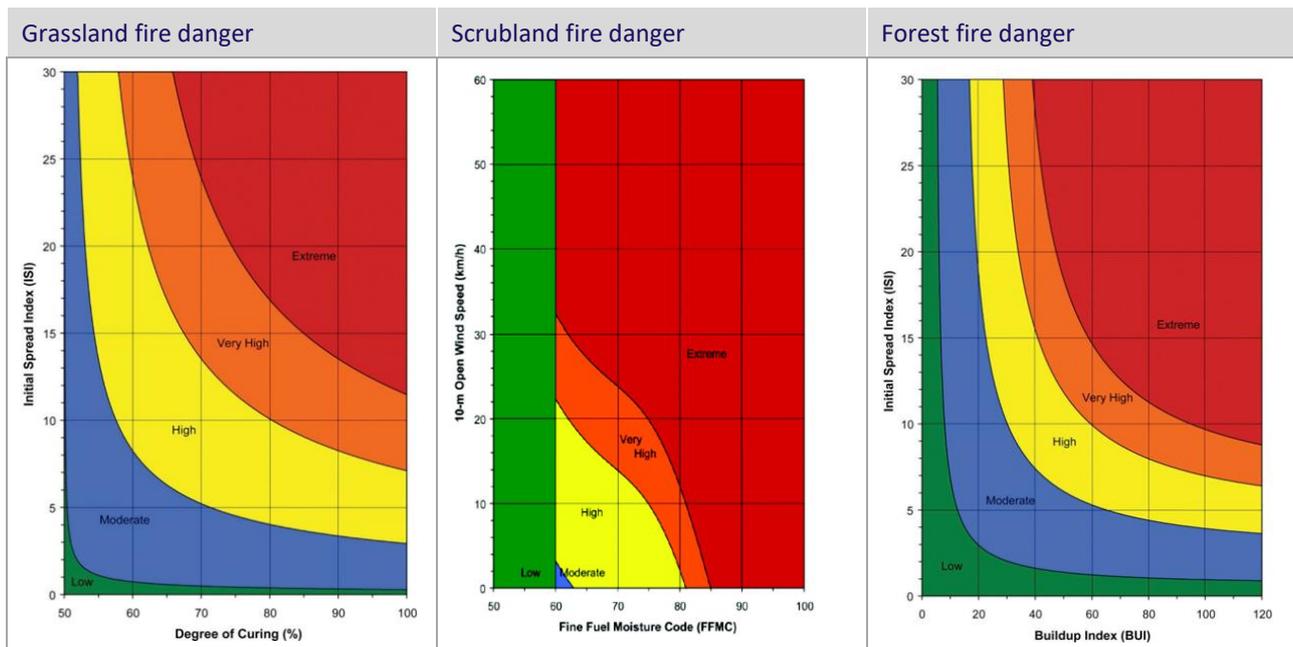
The trigger thresholds make use of:

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

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

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

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



Prohibiting fires in open air (section 52)

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

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

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

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

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

Trigger thresholds for prohibiting fire in open air

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

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

Restricting and prohibiting activities (section 52)

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

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

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

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

Prohibition or restriction means:

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

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

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

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

Trigger thresholds for restricting or prohibiting activities under section 52

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

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

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

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

Activities and risk mitigation

Forestry operations

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

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

Powerline auto-reclosers

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

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

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

Hot works

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

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

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

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

Fireworks

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

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

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

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

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

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

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

Communicating changes in fire seasons and restrictions or prohibitions

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

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

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

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

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

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

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

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

Fire permits

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

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

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

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

Council bylaws, regional plans, legal covenants or restrictions

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

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

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

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

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

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

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

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

When a permit is needed

The need for a fire permit is based on:

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

Fire types

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

- Authorised (no permit required)
- Permit required

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Permits in prohibited fire seasons or during prohibitions under section 52

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

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

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

Applying for a permit

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

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

Assessment

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

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

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

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

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

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

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

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

Mandatory conditions

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

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

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

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

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

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

Firebreaks

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

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

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

Fire hazard removal

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

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

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

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

Reporting fire hazards

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

Assessment of fire hazards

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

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

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

Initial review

The assessor starts by answering four key questions:

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

Risk assessment matrix

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

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

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

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

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

Outcomes from the fire hazard assessment

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

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

Powers of entry

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

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

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

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

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

Fire hazard removal notice (section 65)

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

The notice:

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

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

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

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

Imminent danger notice (section 68)

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

Anyone receiving the verbal notice should be able to understand:

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

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

Regulatory compliance

Fire and Emergency's role

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

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

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

Contact Fire and Emergency

In case of an emergency please call 111

General enquiries and questions

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

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

Lodge a complaint

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

Fire hazards

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

Local contacts for this plan

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

Glossary

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Land use – How the land is used – e.g. 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.

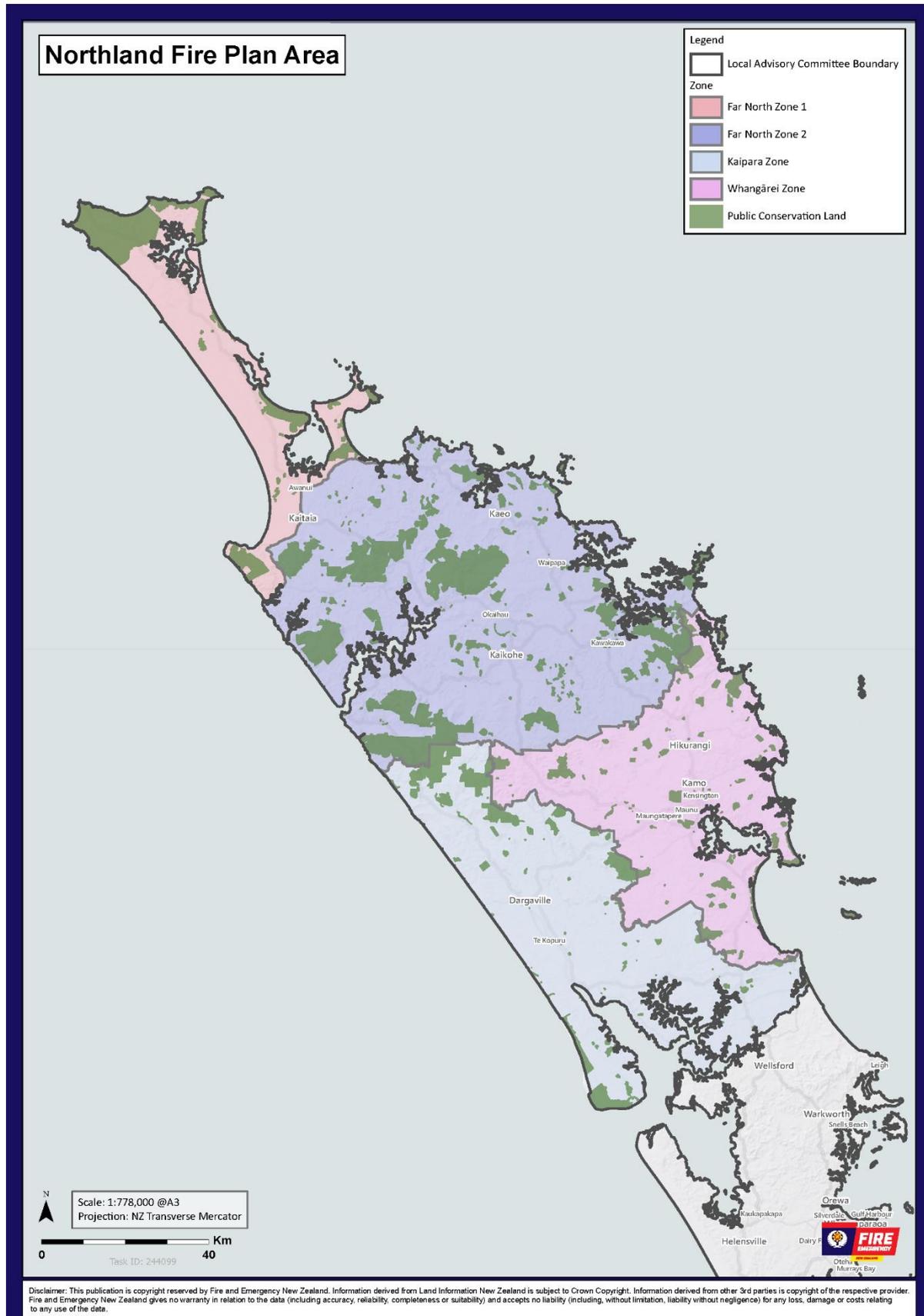
Public conservation land (PCL) – land used for conservation purposes, including National Parks and forest parks. Often managed by Department of Conservation or the regional council.

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.

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.



Area overview

Geography

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

Northland has three territorial districts that are covered by three territorial authorities: The Far North, Whangārei 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 behaviour.

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 with regard to fire risk reduction, e.g. planned Home Fire Safety Visits to isolated lower socio-economic communities, and promotion of our FireWise programmes.

	Northland LAC	Far North Zone 1	Far North Zone 2	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 different parts of the fire plan area, the area is divided into five different fire season zones to allow for appropriate fire control measures to be applied locally. These are:

- [Far North Zone 1](#)
- [Far North Zone 2](#)
- [Whangārei Zone](#)
- [Kaipara Zone](#)
- [Public Conservation Land](#)

Far North Zone 1 and Zone 2 currently fall within the Far North territorial authority district boundary and the Whangārei and Kaipara Zones fall within their respective territorial authority district boundaries. However, we may change the zone boundaries or include additional zones in the future if additional control is required, and as a result the public should not necessarily assume the fire control zone will always follow council district boundaries.

Zone 1 in the Far North 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 Zone 2, Whangārei Zone and Kaipara Zone are similar in fire danger progression throughout the fire season. However, having the five zones in

Northland allows for more flexibility in setting fire season status in different parts of the district due to local climatic variations.

The fire danger in Northland generally follows a progression from north to south, with Far North Zone 1 typically experiencing dryer conditions first. The zone also experiences elevated fire danger conditions during the months of October and November due to seasonal wind events that increase the rate of spread of fires.

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

New Zealand Defence Force

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

None of the scheduled Defence Areas are in the 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.

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	Pīpīwai	Escaped rubbish fire
2021	Waipū Caves	Lawn mower fire
2020	Binnie Street, Paihia	Arson
2020	Ngāti Hine Block, Ngāpipitoa Road, Moerewa	Arson
2020	Ahipara fire, including mass evacuations	Arson
2020	Pīpīwai	Unknown but suspicious
2020	Whangārei 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	Hōreke	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 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 hāngī 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

Email: NorthlandFirePlan@FireandEmergency.nz

Schedule of stakeholders

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

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

National-level stakeholders

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

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

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

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

Area-level stakeholders

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

Stakeholder	Fire plan development	Fire plan amendment	Changing fire season to prohibited	Section 52 fire prohibitions	Section 52 restrictions/prohibitions on activities
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

Stakeholder	Fire plan development	Fire plan amendment	Changing fire season to prohibited	Section 52 fire prohibitions	Section 52 restrictions/prohibitions on activities
Local Advisory Committee	Consulted while creating plan	Public consultation	Notify via public channels	Direct contact	Notify via public channels
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

Stakeholder	Fire plan development	Fire plan amendment	Changing fire season to prohibited	Section 52 fire prohibitions	Section 52 restrictions/prohibitions on activities
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
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
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

Stakeholder	Fire plan development	Fire plan amendment	Changing fire season to prohibited	Section 52 fire prohibitions	Section 52 restrictions/prohibitions on activities
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
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 have an interest across the whole fire plan area, please contact us about being added to this list.

Zone information

Far North Zone 1

Geography

The Southern boundary of Far North Zone 1 is defined by the northern side of State Highway 10 from and including Taipa to Awanui. The western side of State Highway 1 between Awanui and including Kaitāia West and the north western side of Kaitāia-Awaroa Road. The northern side of the Herekino River and the Herekino Harbour.

Far North Zone 1 equates to approximately 16 percent of the total land mass of Northland and is part of the Far North District. The Zone extends from Cape Reinga in the north to the Herekino Harbour in the west, and Taipa on the east coast. The land in the zone forms a narrow peninsula with many residents living without reticulated water supplies and living off both the land and sea.

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 Far North Zone 1 population consists 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 and has a high proportion of older people and young people in the communities within the fire zone. Zone 1 has a deprivation index of 8.2.

Climate/ weather

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 almost all of the time. Higher humidity decreases fine fuels making ignition less easy and decreasing spread rates.
- has mild subtropical temperatures similar to that of other parts of Northland as a result 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.

Station	Median fire season winds	Median fire season relative humidity	Median fire season temp	Mean fire season rainfall
Aupōuri	22 km	73%	20.8°	608 mm

Land cover/land use

The Far North Zone 1 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.

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 <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 type="checkbox"/>	<input checked="" type="checkbox"/>
Primary production <ul style="list-style-type: none"> Stubble burning, vegetation burn-off 	<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 type="checkbox"/>	<input checked="" type="checkbox"/>
Tri-Board Mill Kaitāia <ul style="list-style-type: none"> 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 <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"/>

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"/>
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– 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 <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"/>
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 of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures
Festivals, particularly held over multiple days with camping <ul style="list-style-type: none"> • Campfires • Increase in people without knowledge of fire risk or rules 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Fireworks <ul style="list-style-type: none"> • Use may be prohibited during high fire danger. Prohibited under S52 in some locations • Pyrotechnics managed by other approvals 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Horse riding, mountain biking <ul style="list-style-type: none"> • Access restricted during high fire danger 	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Motorsports e.g. rally, 4WD and dirt biking <ul style="list-style-type: none"> • High temperature operating parts and sparks from vehicles 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Hunting, camping, hiking or tramping <ul style="list-style-type: none"> • Campfires • Access restricted during high fire danger 	<input checked="" type="checkbox"/>	<input 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	<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 data from the Aupōuri Weather station, this zone experiences:

- 1.9 days of extreme forest fire danger per year
- 3.3 days of very high forest fire danger per year

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
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 predominant fuel types in this zone are forest and grass. The Aupōuri Karikari area also has considerable scrubland but much of this is within public conservation land.

Zone 1 in the Far North is currently in a permanent restricted fire season due to the extensive scrublands and the history of wildfires during winter months

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.

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:

- 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

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

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

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

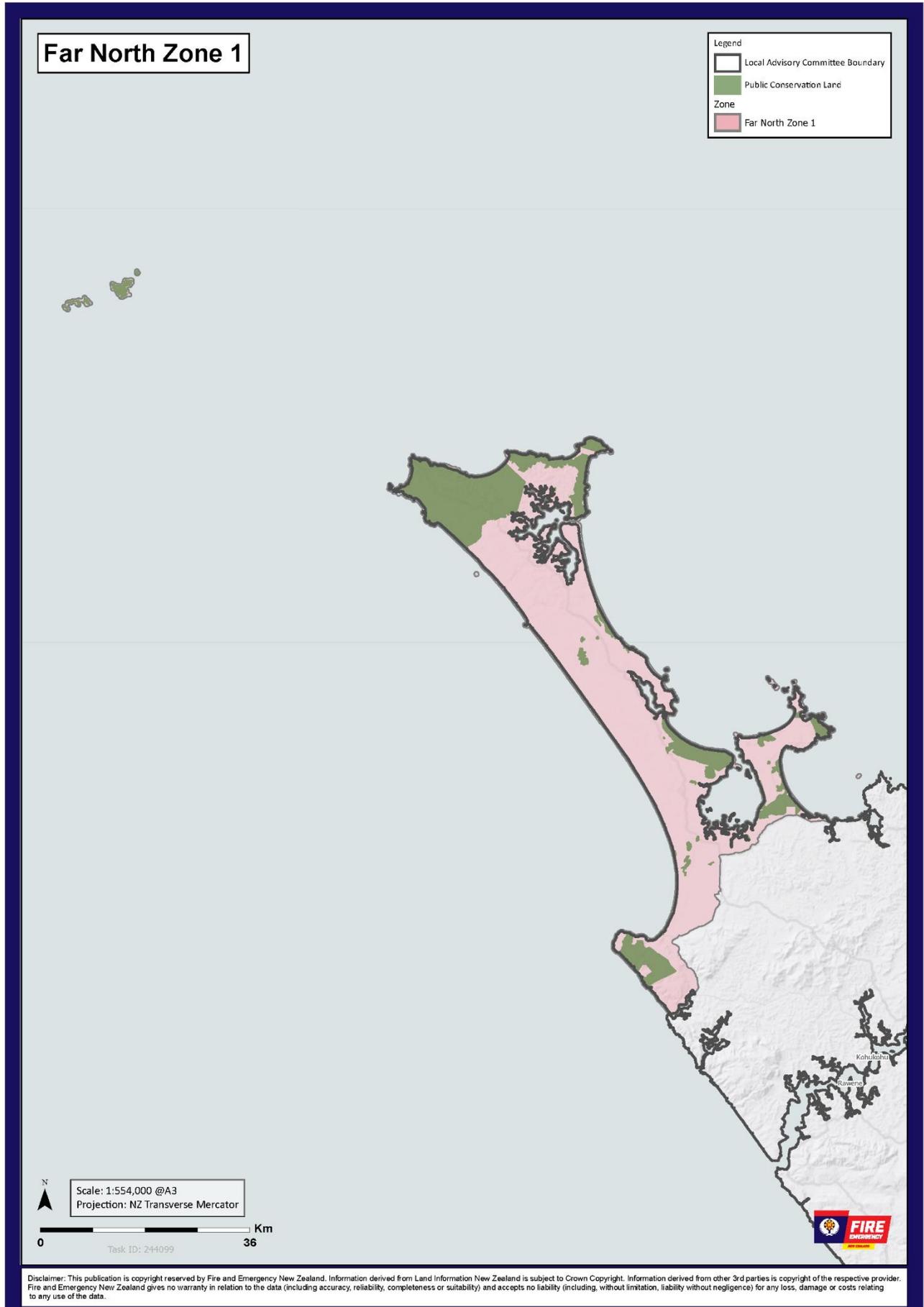
There are no arrangements to limit this type of activity in place currently. When grass curing is higher than 80% combined with high winds speeds through the peak burning time of the day, the public are advised that these activities should be done either; earlier in the morning, or in the evenings when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

Representative remote automated weather stations

The Remote Automated Weather Station (RAWS) at Aupōuri is used to determine whether the trigger thresholds have been met.

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

Far North Zone 1 map



Far North Zone 1 stakeholders

Stakeholder	Fire plan development	Fire plan amendment	Changing fire season to prohibited	Section 52 fire prohibitions	Section 52 restrictions/prohibitions on activities
Department of Conservation	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
Local Advisory Committee	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

Stakeholder	Fire plan development	Fire plan amendment	Changing fire season to prohibited	Section 52 fire prohibitions	Section 52 restrictions/prohibitions on activities
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 public 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
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
Top Energy	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
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

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

Far North Zone 2

Geography

This zone extends south from Far North Zone 1 to the Far North territorial authority district boundary with the Whangārei and Kaipara territorial authority districts.

Far North Zone 2 equates to approximately 36 percent of the total land mass of Northland and is the lower half of the Far North District. Zone 2 covers Kaitāia East and Mangōnui in the north, to the Whangārei and Kaipara District borders in the south.

The district is sparsely populated with a permanent population of approximately 50,000.

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 Far North Zone 1.

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 the zone identify themselves as Māori compared to the National average of 16.7 percent.

The Far North Zone 2 population consists of 21.7 percent less than 15 years of age and 19 percent aged over 65.

The zone experiences some of the highest deprivation in New Zealand and has a high proportion of older people and young people in the communities within the fire zone. Far North Zone 2 has a deprivation index of 7.9.

Climate/weather

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 the hills to slow the wind down. Stronger winds increase drying rates and fire spread rates
- slightly higher humidity due to coastal influences from both sides meaning that the wind flows off the ocean almost all of the time. Higher humidity increases fine fuels make ignition less easy and decrease spread rates
- mild subtropical temperate similar to than other parts of Northland as a result of the coastal influence
- summer rainfall is consistently low because high pressure systems frequently cover the upper north island. Rainfall variations between seasons here less than other parts of Northland because there is no rain shadow effect resulting from hills as well as this area having lower mean fire season rainfall than other

parts of Northland. This means the area is subject to significant drying most summers.

Station	Median fire season winds	Median fire season relative humidity	Median fire season temp	Mean fire season rainfall
Waitangi	19 km	64%	21.deg	638 mm

Land cover/land use

The Far North Zone 2 has more indigenous forest land than the other zones, but less high-producing exotic grassland than the Northland average (39.8 percent vs 47.9 percent). The zone is otherwise quite similar to the Northland average.

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 Kaitiāia, 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"/>

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
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 on use of fire and other activities in vicinity 	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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"/>
Roothing 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

Cultural and recreational activities and events

- 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.

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 <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"/>

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
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 <ul style="list-style-type: none"> • 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, 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 the Waitangi Forest weather station, this zone experiences:

- 6.2 days of extreme forest fire danger
- 5 days of very high forest fire danger

Fire history

The known fire history for this zone includes:

Year	Fire	Cause
2021	Rawene	Arson
2020	Binnie Street, Paihia	Arson
2020	Ngāti Hine Block, Ngāpipitōa 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 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.

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

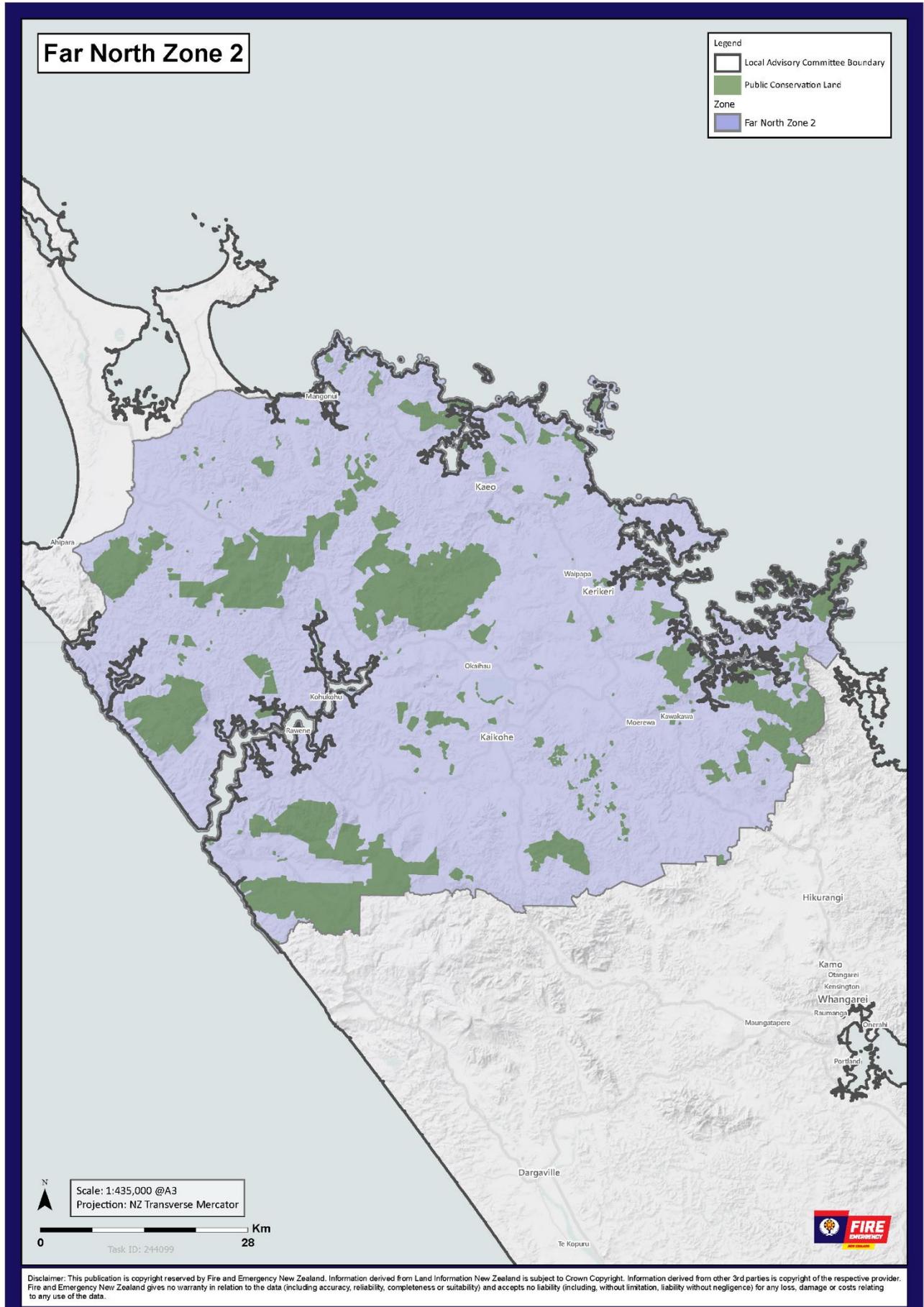
There are no arrangements to limit this type of activity in place currently. When grass curing is higher than 80% combined with high winds speeds through the peak burning time of the day, the public are advised that these activities should be done either; earlier in the morning, or in the evenings when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

Representative remote automated weather stations

The Waitangi Forest Remote Automated Weather Station (RAWS) is used to determine whether the trigger thresholds have been met.

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

Far North Zone 2 map



Far North Zone 2 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
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
Kiwi Rail	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
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

Stakeholder	Fire plan development	Fire plan amendment	Changing fire season to prohibited	Section 52 fire prohibitions	Section 52 restrictions/prohibitions on activities
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 public 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
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
Top Energy	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
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
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
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

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

Whangārei Zone

Geography

The Whangārei Zone makes up 22.6 percent of the Northland landmass (2,855 km²) but is home to half of the inhabitants (96,000). It includes Northland's most populous city, Whangārei. Statistics New Zealand does not define a geographic area for urban Whangārei. However, the Whangārei District Growth Strategy 2010 provides population projections for Whangārei City and its urban villages – Kamo, Maunu, Onerahi, Ōtaika/Toetoe and Tikipunga. This shows where the Whangārei District Council sees its urban-rural split.

Other urban areas of note include Ruākāka (pop. 2,360), One Tree Point (pop. 2,030), and Hikurangi (pop. 1,680). The population outside of urban Whangārei is spread across smaller towns and rural farms.

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. Identical to the Far North, this influx of visitors needs to be aware of the fire control measures in place.

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 has a resident population of 87,696. This is split between the urbanised Whangārei City, the urban village within Kamo, Manu, Onerahi, Ōtaika/Toetoe and Tikipunga, and areas of rural land which makes up more than 80 percent of the Whangārei Zone. The urbanised area of Ruākāka is intended to act as a satellite for Whangārei, led by the needs of Marsden Point.

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

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

Whangārei experiences slightly more deprivation than the New Zealand average, with a high proportion of older people in the communities within the fire zone. Whangārei has a deprivation index of 6.4.

Climate/weather

The general climate of the Whangārei Zone is similar to that of Far North Zone 2 and Kaipara Zone. However, it has been made a separate zone because the actual weather at the time can be significantly different depending on where it has come from.

Station	Median fire season winds	Median fire season relative humidity	Median fire season temp	Mean fire season rainfall
Whangārei	17 km	64	20°	658 mm

Land cover/land use

Primary production makes up a significant part of the district land use. Pastoral farming occupies around 37 percent of the land area, along with dairying at 21 percent and forestry at 21 percent. Urban areas and reserves make up 10 percent of land area, along with lifestyle blocks which also make up 10 percent. Department of Conservation manages about 6 percent of the Whangārei Zone 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
Horticulture e.g.: kiwifruit, avocado, 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"/>
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"/>
Carter Holt Harvey LVL Plant – Whangārei / Ruākāka <ul style="list-style-type: none"> Impacted by restrictions on activities for suppliers 	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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"/>
Whangārei Landfill <ul style="list-style-type: none"> Protected by own controls on use of fire and other activities in vicinity 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
North Power - 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"/>
Roothing 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"/>
Marsden Point oil refinery and pipeline <ul style="list-style-type: none"> • 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"/>
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 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
- Te Araroa Trail
- Offshore Islands
- Parahaki Mountain Bike Track
- Forestry blocks
- Glenbervie Adventure Park
- Heads Up Adventures Whangārei

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.

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
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 <ul style="list-style-type: none"> • Campfires • Increase in people without knowledge of fire risk or rules 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Fireworks <ul style="list-style-type: none"> • Use may be prohibited during high fire danger. Prohibited under S52 in some locations • Pyrotechnics managed by other approvals 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Horse riding, mountain biking <ul style="list-style-type: none"> • Access restricted during high fire danger 	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Motorsports e.g. rally, 4WD and dirt biking <ul style="list-style-type: none"> • High temperature operating parts and sparks from vehicles 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Hunting, camping, hiking or tramping <ul style="list-style-type: none"> • Campfires • Access restricted during high fire danger 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Beach fires <ul style="list-style-type: none"> • Campfires • Ecological values at risk 	<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 the Whangārei weather station this zone experiences:

- 1.3 days of extreme forest fire danger
- 2.8 days of very high forest fire danger

Fire history

The known fire history for this zone 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.

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

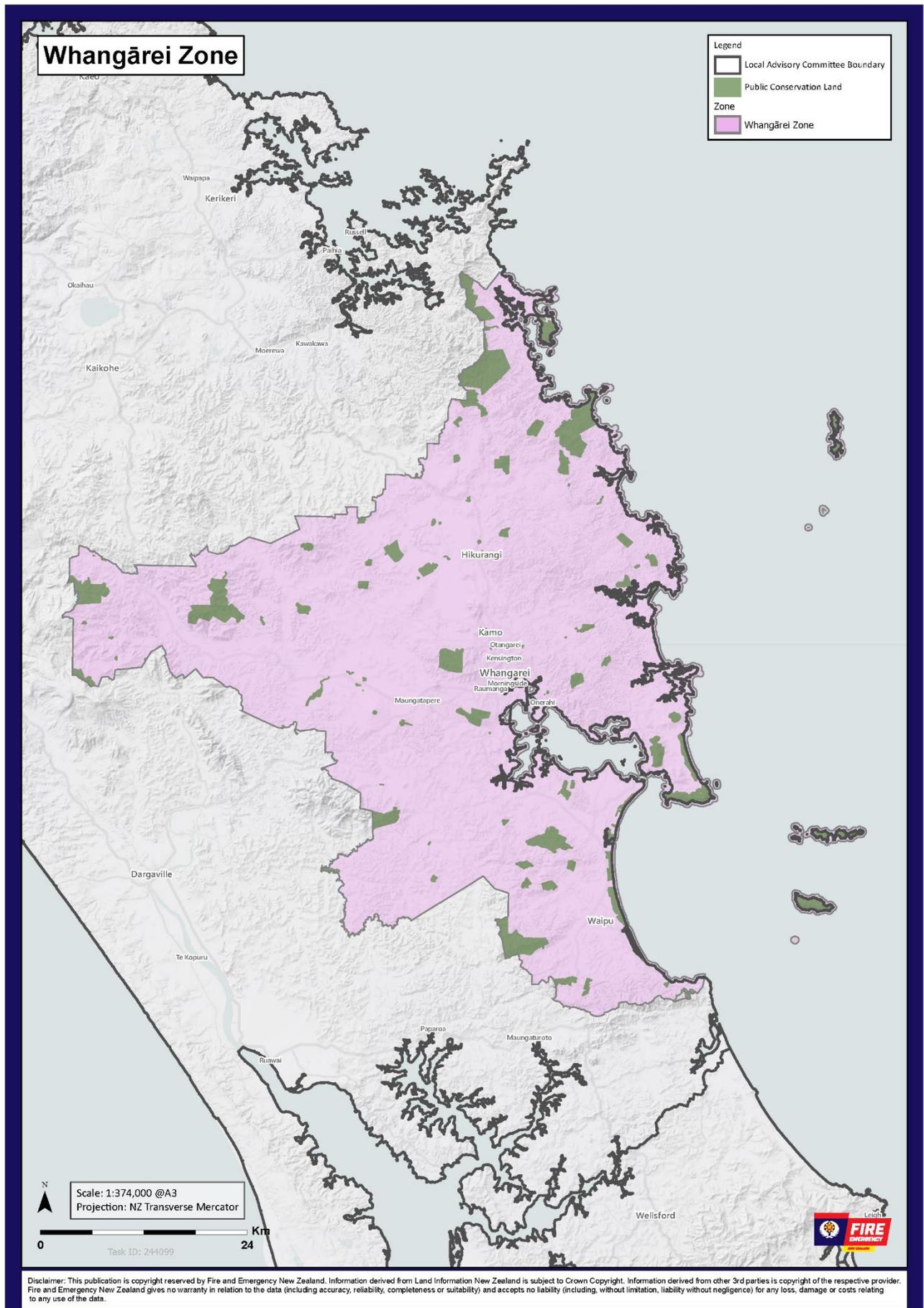
There are no arrangements to limit this type of activity in place currently. When grass curing is higher than 80% combined with high winds speeds through the peak burning time of the day, the public are advised that these activities should be done either; earlier in the morning, or in the evenings when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

Representative remote automated weather stations

The Whangārei Airport Remote Automated Weather Station (RAWS) is used to determine when the fire danger has reached the trigger points to initiate a change in the Fire Season status.

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

Whangārei Zone map



Whangārei Zone stakeholders

Stakeholder	Fire plan development	Fire plan amendment	Changing fire season to prohibited	Section 52 fire prohibitions	Section 52 restrictions/prohibitions on activities
Department of Conservation	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Federated Farmers of New Zealand	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Forest Owners Association	Pilot Feedback	Public consultation	Notify via public channels	Direct contact	Notify via public channels
Friends of Matakohe-Limestone Island	Public Feedback	Public consultation	Notify via public channels	Notify via public channels	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
Kiwi Rail	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
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

Stakeholder	Fire plan development	Fire plan amendment	Changing fire season to prohibited	Section 52 fire prohibitions	Section 52 restrictions/prohibitions on activities
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 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
St John Ambulance	Consulted while creating plan	Public consultation	Notify via public channels	Direct contact	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

Stakeholder	Fire plan development	Fire plan amendment	Changing fire season to prohibited	Section 52 fire prohibitions	Section 52 restrictions/prohibitions on activities
Te Roroa Whatu Ora Trust	Consulted while creating plan	Public consultation	Notify via public channels	Through Iwi Liaison Officer	Notify via public channels
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 have an interest in this zone, please contact us about being added to this list.

Kaipara Zone

Geography

The Kaipara Zone 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](#).

The roughly triangular zone stretches from a thinning of the [Northland Peninsula](#) south of Kaiwaka and Mangawhai in the southeast to the [Waipoua Forest](#) in the northwest.

The zone's 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. The region is bisected by the Northern [Wairoa River](#) and its tributaries, which flow 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 has a residential population of 24,100. Dargaville is the district's largest town, with a population of 5,170. Mangawhai is a significant area for the zone with an urban population of around 3,000 and is Northlands fastest growing area and experiences substantial population increases during weekends, and over the summer months.

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

Kaipara's population consists of 19.4 percent under 15 years old and 21.2 percent are over 65.

The Kaipara Zone 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

The general climate of the Kaipara Zone is similar to that of Far North Zone 2 and Whangārei Zone however it has been made a separate zone because the actual weather at the time can be significantly different depending on where it has come from.

Station	Median fire season winds	Median fire season relative humidity	Median fire season temp	Mean fire season rainfall
Pouto	13 km	69	19°	614 mm

Land cover/ land use

High-producing exotic grassland dominates the Kaipara Zone, making up almost two thirds of land cover. While the proportion of exotic forestry and forest – harvested areas are similar to the Northland proportion, there is a lower proportion of other forestry land cover in the Kaipara Zone.

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, 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"/>
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"/>
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"/>

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
North Power - 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"/>
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"/>

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
Marsden Point oil refinery and pipeline <ul style="list-style-type: none"> Protected by own controls on use of fire and other activities in vicinity 	☒	☒	☒
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 	☒	☒	☒
Telecommunications network and towers <ul style="list-style-type: none"> Protect by applying controls to surrounding areas 	☐	☐	☒

Recreational locations

- Public conservation land
- Te Araroa Trail
- Offshore islands
- 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.

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.

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
Agricultural events and markets <ul style="list-style-type: none"> Use of machinery - sparks 	☒	☐	☒
Marae – hāngī and other cultural fires	☒	☒	☒

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
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 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	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Offshore islands	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Waipoua Forest	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Pouo 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

Frequency of elevated fire danger

On average based on data from the Pouto Remote Automated Weather Station, this zone experiences:

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

Fire history

The known fire history for this zone 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

Most of these fires were caused by arson or other illegal activity.

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.

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

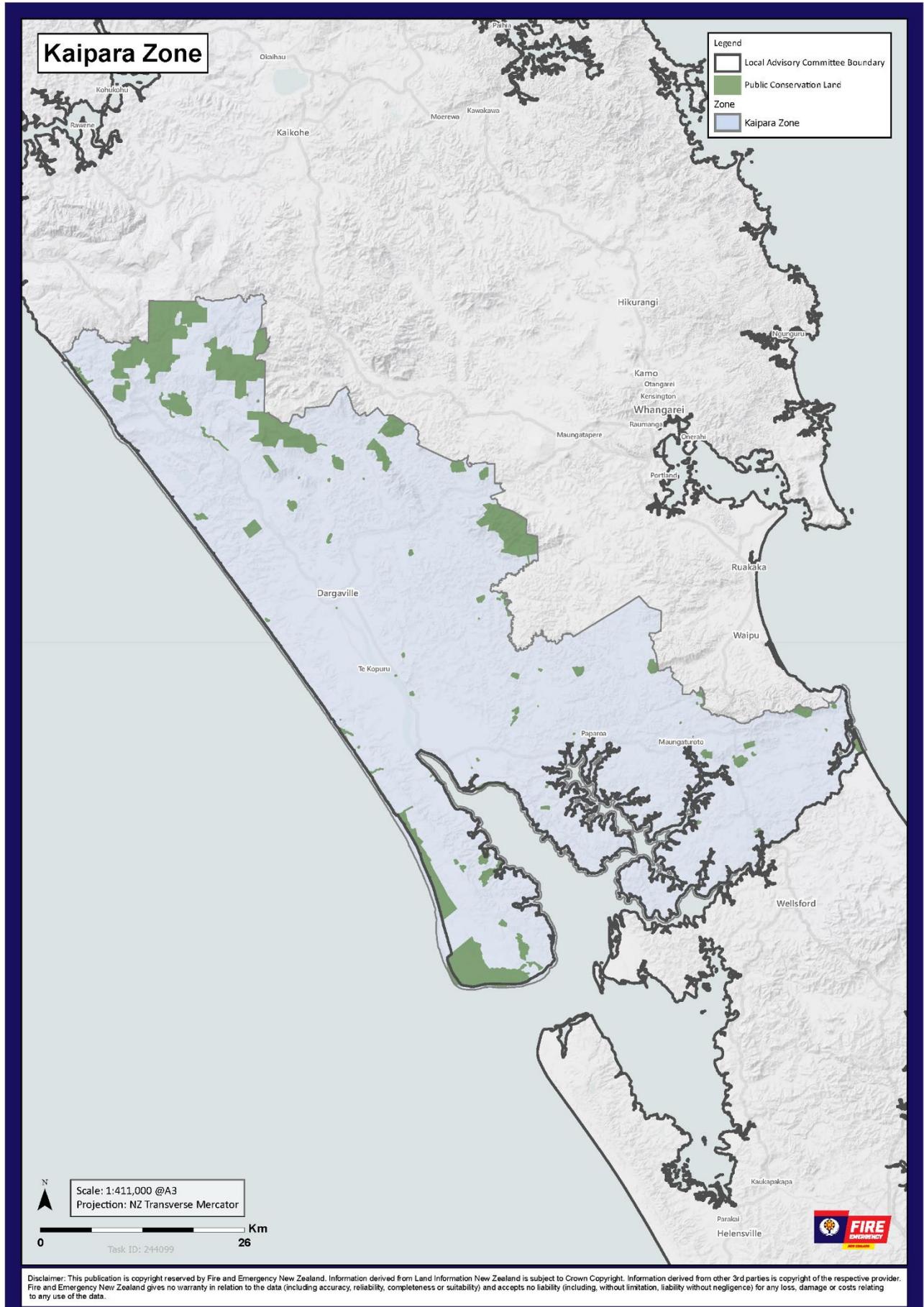
There are no arrangements to limit this type of activity in place currently. When grass curing is higher than 80% combined with high winds speeds through the peak burning time of the day, the public are advised that these activities should be done either; earlier in the morning, or in the evenings when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

Representative remote automated weather stations

The Dargaville Remote Automated Weather Station (RAWS) is used to determine when the fire danger has reached the trigger points to initiate a change in the Fire Season status.

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

Kaipara Zone map



Kaipara Zone stakeholders

Stakeholder	Fire plan development	Fire plan amendment	Changing fire season to prohibited	Section 52 fire prohibitions	Section 52 restrictions/prohibitions on activities
Department of Conservation	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Federated Farmers of New Zealand	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
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
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 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

Stakeholder	Fire plan development	Fire plan amendment	Changing fire season to prohibited	Section 52 fire prohibitions	Section 52 restrictions/prohibitions on activities
Northland Inc (Chamber of Commerce)	Public consultation	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
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
Top Energy	Consulted while creating plan	Public Consultation	Notify via public channels	Direct contact	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 Roroa Whatu Ora 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 have an interest in this zone, please contact us about being added to this list.

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"/>

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.

Restricted season year round 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 the Northland District. All current and future fire season change notifications within the Northland Fire Control Zones will reference this agreement and Fire and Emergency will erect signage to reflect this agreement.

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.