Fire Plan for Te Matau-a-Māui / Hawke's Bay 2024 - 2027





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Status of this document

This document is issued by Fire and Emergency New Zealand.

Recommendations for change

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

Requests or recommendations for changes to this material should be sent to District manager Hawkes Bay. See <u>Local contacts</u>.

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Contents

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

Fire permits	15
Council by-laws, regional plans, legal covenants, or restrictions	16
When a permit is needed	16
Fire types	16
Authorised fire types, descriptions, and conditions in a restricted fire season	17
Authorised fire types on public conservation land in a restricted fire season	19
Authorised fire types, descriptions, and conditions in a prohibited fire season	21
Authorised fire types on public conservation land in a prohibited fire season	23
Permits in prohibited fire seasons or during prohibitions under section 52	23
Applying for a permit	24
Assessment	24
Mandatory conditions	25
Firebreaks	25
Fire hazard removal	26
Reporting fire hazards	26
Assessment of fire hazards	26
Initial review	26
Risk assessment matrix	27
Outcomes from the fire hazard assessment	27
Powers of entry	29
Fire hazard removal notice (section 65)	29
Imminent danger notice (section 68)	29
Regulatory compliance	
Fire and Emergency's role	
Contact Fire and Emergency	
General enquiries and questions	
Lodge a complaint	
Fire hazards	
Local contacts for this plan	
Glossary	31
Te Matau-a-Māui /Hawkes Bay information	
Area overview	
Schedule of stakeholders	41
National-level stakeholders	41
Area-level stakeholders	43
Zone information	46
Central Hawkes Bay	46
Thresholds	51
Zone Map – Central Hawke's Bay	
Heretaunga/Aburiri – Hastings/Napier	
Thresholds	
Zone Map - Heretaunga/Ahuriri – Hastings/Napier	
Mahia Peninsula and Wairoa Coast	
Thresholds	68
Zone Map Mahia Peninsula and Wairoa Coast	

Tararua	71
Thresholds	76
Zone Map - Tararua	78
Wairoa Rural	79
Thresholds	84
Zone Map - Wairoa rural	86
Public conservation land	87
Thresholds	
Map	
NZ Defence Force	90
Forestry	91
Thresholds	95
For forestry operations	96
Zone Map	98
Appendix One	
Voluntary restrictions on high-risk activities	
Definitions	
For forestry operations	
For outdoor hot works or agricultural, horticultural, lifestyle blocks and roadside maintenance	
operations	
National default trigger for powerline operations	101

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V 4.0	22 July 2024	Public consultation feedback incorporated and published. Plan approved for use

Approval

Full Name: Bruce Stubbs

Title: Region Manager

Date: 15/7/2024

Signature

Add another block of other signatures as required

Introduction

How to use this document

The front sections of this document cover:

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

The back section, <<u>Local area> information</u>, is for specific local information about this fire plan area. Fire plans must take the local fire risk conditions into account and not just apply a blanket standard across the country. All of our areas have different levels of risk, so what may be appropriate for one area of the country may not apply somewhere else.

Why do we have fire plans?

Fire plans are required by <u>section 22</u> of the <u>Fire and Emergency New Zealand Act 2017</u> (the Act) and the <u>Fire and Emergency New Zealand (Fire Plans) Regulations 2018</u>.

According to <u>Regulation 5</u> 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 <u>52 to 58</u> and <u>62 to 68</u> of the <u>Fire and Emergency New Zealand Act 2017</u> in each
 local area; and
- ensure that the particular fire risk conditions in each local area are considered by Fire and Emergency when it establishes policies and procedures for, and exercises fire control powers within, that local area.

This means that we need to explain how we:

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

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

Content of the fire plans

This Fire Plan is about how, when, and why Fire and Emergency will exercise its fire control powers to reduce the incidence of unwanted fires in the area.

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

Fire plans must do the following.

Describe local fire risk conditions

A fire plan must describe the particular fire risk conditions that exist or are likely to exist in the local area. This means that each fire plan:

- is accurate and relevant for its area
- can be broken down into specific zones within the area where fire risk conditions or control measures differ.

Set out policy

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

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

Set out procedures

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

- details of the processes that Fire and Emergency will follow
- factors that Fire and Emergency will consider when deciding to:
- issue notices of prohibitions or restrictions for fire control under section 52 of the Act
 - declare a prohibited or restricted fire season in relation to the local area, or a part of that area, under section 56 of the Act
 - issue notices in relation to firebreaks under section 62 of the Act
 - issue notices to remove or destroy vegetation or other things on land under section 65 of the Act.

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

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

A fire plan must be consistent with:

- Fire and Emergency's national strategy
- any local planning by Fire and Emergency for the local area
- any current operational service agreement and memorandum of understanding that Fire and Emergency has with other agencies or people relevant to the local area
- any relevant Fire and Emergency policies. The first part of this template highlights policies that impact our regulatory role, However, fire plans must comply with other Fire and Emergency internal policies, such as records management.

Cover the entire area

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

Set out Fire and Emergency's fire control powers

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

Local area and zones

Local area

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

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

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

Zones

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

We also look at previous analyses of the wildfire threat.

Applying fire seasons to zones

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

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

Consultation

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

Publish a notice

The notice should:

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

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

Consider submissions

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

Include a list of key stakeholders

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

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

Record stakeholder engagement

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

Review and amendment

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

However, we must review the fire plan for each local area at least once every 3 years, or if there are significant changes to the boundaries of the local area.

When we review the fire plan for a local area, we must either:

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

4 Rs of emergency management

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

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

The next sections outline the work Fire and Emergency does in each of the 4 Rs.



Reduction

Reduction means:

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

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

For Fire and Emergency, this work includes

- our National Framework for Fire Control. This framework includes:
- these fire plans
 - our fire control powers for reducing the likelihood of unwanted fire from the use of fire in the open air
 - our fire control powers for reducing the likelihood of other causes of wildfire by setting fire seasons, requiring fire permits, firebreaks, and fire hazard removal
- evacuation procedures and evacuation schemes for buildings
- input into building design for fire safety, and our part in the building consent application process
- the national automatic fire alarm system
- influencing policies within standard-setting bodies and with central and local government

• public education campaigns around escape planning, fire safety, and smoke alarms.

Readiness

Readiness means developing operational systems and capabilities before an emergency occurs. These include self-help initiatives for the public, specific programmes for emergency services, lifeline utilities and other services.

For Fire and Emergency, this includes:

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

Response

Response means:

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

For Fire and Emergency, this includes:

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

It can also include responding to:

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

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

Recovery

Recovery means helping people who have suffered loss and trauma to receive the appropriate support. It involves coordinated efforts and processes to bring about the immediate, medium-term, and long-term recovery of a community following a major emergency.

For Fire and Emergency, this includes:

• during our immediate actions at emergencies, following good incident management practices that minimise the short-term and long-term impact and consequences of the original event

• helping those immediately affected by the emergency get the support they need, including making sure people suffering loss and trauma receive appropriate support from the relevant agency.

In addition, as a precursor to recovery, we:

- support and encourage communities to pre-plan for major events
- support recovery/clean-up activities to strengthen community resilience following an incident.

Our commitment to working with Māori as tangata whenua

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

We recognise:

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

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

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

National Framework for Fire Control

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

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

The public face of the framework is:

- the <u>Checkitsalright.nz</u> website
- the <u>fire permit application system</u>
- these fire plans
- additional information on our public website <u>fireandemergency.nz</u>.

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

- setting fire seasons
- prohibiting fire in open air or revoking the prohibition
- prohibiting or restricting activities or revoking the prohibition or restriction
- fire permitting
- control of firebreaks
- fire hazard removal

Our policies

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

Policy	Detail
Fire seasons, prohibitions, and restrictions policy	Relates to sections $52 \text{ to } 58$ of the Act and decisions to:
	declare or revoke a prohibited or restricted fire season
	prohibit fire in open air or revoke a prohibition
	 prohibit or restrict activities that may cause a fire to start or spread and revoke prohibition or restriction.
Fire permitting policy	Supports the policy above and defines actions for:
	 supporting a member of the public who is applying for a fire permit
	assessing a fire permit application
	granting or renewing a fire permit
	refusing to grant or renew a fire permit
	 suspending or cancelling a fire permit
	operational decisions when responding to an alarm of fire in open air.
Firebreaks policy	Relates to sections $\frac{62 \text{ to } 64}{64}$ of the Act to support decisions and actions relating to requirements for landholders to:
	make and clear any firebreak on the landholder's land
	remove any vegetation or other thing from an existing firebreak
Fire hazard removal	Relates to sections 65 to 68 of the Act and decisions about what to do when:
policy	a potential fire hazard is reported to Fire and Emergency
	we assess a potential fire hazard
	• we arrange for the removal or destruction of a confirmed fire hazard.
Regulatory compliance policy	Covers how we monitor and take action to identify and influence landowners and others to comply with the requirements of the Act and other relevant legislation. This covers activities which:
	reduce harm from unwanted fire
	 support the safe use of fire as a land management tool and reduce harm if fire escapes control
	minimise avoidance of the Fire Emergency levy
	 reduce non-compliance with any legislation or regulations under which Fire and Emergency New Zealand has a compliance function.

Fire risk conditions

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

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

We also take these into account when setting fire seasons.

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

Decision-makers must be satisfied that:

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

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

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

Condition	Description
Fire weather science	 The NZ Fire Danger Rating System includes measures such as: Build-up Index (BUI) Initial Spread Index (ISI) Fire Weather Index (FWI) Grass curing percentage Fine Fuel Moisture Code (FFMC) Drought code (DC). Factors that influence how a fire spreads, including:
	 steepness of slope direction fire is facing, i.e. aspect terrain features, e.g. gullies, and chimneys.
Fuel behaviour models	The characteristics of fuel, or vegetation, that contribute to fire ignition and spread.
History of fires	History of recent fires and their ignition sources in the area, based on available fire data.
Socio-economic factors	Factors that influence the likelihood of fires being lit for cooking purposes and to dispose of rubbish in backyards, e.g. absentee owners and lifestyle blocks burning during holiday season. Expectations of the public to be able to light certain types of fires, e.g. cultural cooking fires.
Time of year	Time of year, e.g. land clearing forestry, land clearing hill and high country, late winter to spring.
Public knowledge – awareness of the risks	The expected public awareness of risks may be low, e.g. a large influx of visitors during summer holiday periods who may reasonably be expected to have little understanding of the risks of lighting fires in an area.
Proximity to property or other values	 The closeness of property or other valuables to fire, for example: life values, e.g. size of land parcels in an urban area distance from commercial forestry.
Ability to respond effectively	 Factors that contribute to our ability to respond to an out of control fire include: availability of response resources, i.e. people and equipment isolation accessibility issues availability of water supplies.
Impacts from natural hazards	Natural hazards impacts are likely to influence resource availability and the likelihood of fires.
People	The presence of people increases the risk of fire.
Impact of other events that increase the risk of the outbreak or spread of fire	Events that increase the risk of potential fire, e.g. the rupture of an oil pipeline.

Fire seasons

Fire and Emergency uses fire seasons to:

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

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

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

Fire seasons are applied to geographic zones based on:

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

There are three types of fire season 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 and you must get a fire permit. This permit may also have specific conditions to make sure you can light a fire safely and it will remain under control.

Prohibited fire season



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

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

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

Open fire seasons

We use an open fire season when the fire danger is consistently low enough that Fire and Emergency does not need to apply additional controls on when people can light fires in the open air. To help you to use fire safely, we have a set of guidelines for fire types that you should follow even when there are no restrictions or prohibitions in place, see the <u>Authorised fire types</u>, <u>descriptions</u>, <u>and conditions</u> table below for guidance.

Note that this does not mean that you can light fires anywhere you want to. You should still check the conditions at <u>checkitsalright.nz</u> and follow any advice provided.

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

Other legislation or regulatory requirements, such as local council or regional council by-laws or air quality plans, may apply additional restrictions, or not allow you to light a fire at all.

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

We still like to hear from you if you are lighting a large fire, e.g. for land management, so that we can share advice on how and when to light and use your fire safely. Go to our <u>Fire Permit website</u>. Select **Lighting a fire in an open season** and complete the address info or use the map. Once the address information updates and confirms an Open fire season, select the Notify Us of your fire button at the bottom of the screen and complete the form.

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

Restricted fire seasons

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

Requiring permits for particular types of fires in the open air lets us know where and when fire is being used. This means our fire brigades don't need to respond unnecessarily.

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

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

Prohibited fire seasons

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

Certain types of fires may still be used, but people need to be very careful with fire during these times. See the section on <u>Authorised fire types in a prohibited fire season</u>.

Trigger thresholds for changing fire seasons

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

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

The trigger thresholds use:

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

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

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

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



Prohibiting fires in open air (section 52)

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

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

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

Fire and Emergency may also prohibit fires in the open air while any targeted supporting legislation is in force to protect public safety. We can't predict what challenges society will face or what public safety measures may be brought about by legislation. An example of this was the <u>Epidemic Preparedness (COVID-19) Notice 2020</u>. Fire and Emergency can do this without needing to consider fire risk conditions or other factors. This might happen if our response capabilities are affected by any public safety issue, 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 <u>section 52</u> of the Fire and Emergency New Zealand Act 2017.

If someone breaches the ban, they can be charged under section 54 of the Act.

Trigger thresholds for prohibiting fire in open air

We can use the same Fire Weather System trigger thresholds for prohibiting fires in the open air under <u>section 52</u> as we do for changing to a prohibited fire season, but use <u>section 52</u> 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 <u>section 52</u> 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. These occasions are known as Red Flag Days or Cross Over conditions. Examples of these activities include but are not limited to:

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

<u>Section 52</u> of the Act allows us to prohibit or restrict one or more activities in an area or areas when we assess that:

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

This table defines prohibition and restriction.

When an activity is	It means the activity
Prohibited	must not be undertaken at all by any person while the prohibition is in effect (except if it is an excluded activity that relates to the carrying out of essential services in the area).
Restricted	can be undertaken subject to certain conditions, such as restrictions on:the times of the daythe manner in which it is undertaken.

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

Essential services are:

• supplying and distributing of food, water, fuel, power, and other necessities

- maintaining transport and communication facilities that are essential to the well-being of the community
- maintaining the health of the community
- maintaining law and order, public safety, and the defence of New Zealand
- preserving property at immediate risk of destruction or damage.

Fire and Emergency can create temporary zones that are smaller than the zones in this fire plan for the purposes of limiting the impact of restricting or prohibiting activities under <u>section 52</u>.

If someone fails to comply with the restriction or prohibition, they can be charged under <u>section 54</u> of the Fire and Emergency New Zealand Act 2017.

Trigger thresholds for restricting or prohibiting activities under section 52

Some industries have their own restrictions that they place on themselves when fire risk increases. However, we will use <u>section 52</u> to apply the restrictions or prohibitions to everyone within the zone when either:

- these voluntary restrictions are not enough to reduce the risk of a fire starting or spreading, or
- we need to restrict or prohibit the public from the same high risk activities.

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

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

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

If we've agreed with stakeholders on set thresholds for implementing a <u>section 52</u> restriction or prohibition, we'll include these in the zone information in this document.

Activities and risk mitigation

Forestry operations

The NZ Forest Owners Association have developed the <u>Forest Fire Risk Management Guidelines (2018)</u> which contains example trigger point tables and what fire prevention actions are suggested during different fire danger levels. Fire and Emergency supports these guidelines.

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

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

Powerline auto-reclosers

Most power companies use a computer-controlled auto recloser system. This attempts to reconnect the power up to three times after a fault, before they send a technician. If a downed wire caused the fault, this creates three potential sparking events.

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

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

Hot works

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

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

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

We will also work with rural land managers to discuss the approach to fire measures, using machinery and equipment during high fire danger periods and the potential effect on local landholders and communities.

Retail fireworks and pyrotechnics

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

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

When fire risk conditions are elevated, Fire and Emergency can restrict or prohibit the use of fireworks, and in certain circumstances, pyrotechnics, as an activity under <u>section 52</u> of the Fire and Emergency New Zealand Act 2017.

Fireworks

Sale of fireworks is regulated by the <u>Hazardous Substances (Fireworks) Regulations 2001</u>. Storage is regulated by the <u>Health and Safety at Work (Hazardous Substances) Regulations 2017</u>.

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

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

Fire and Emergency is responsible for promoting fire safety, so we advise the public on using fireworks safely. We recommend people attend publicly organised displays where possible.

Pyrotechnics

Applications for indoor and outdoor pyrotechnic displays need to comply with sections <u>9.35</u> and <u>9.43</u> of the Health and Safety at Works (Hazardous Substances) Regulations 2017.

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

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

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

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

Sometimes, after we consider the relevant risk conditions in a particular area, we may decide that, even where the requirements of the Health and Safety at Work (Hazardous Substances) Regulations 2017 could be met in terms of controlling fires igniting within an exclusion zone, the risk to the surrounding area outside of any exclusion zone nevertheless requires a prohibition or restriction of pyrotechnic displays generally under <u>section 52</u>. However we are only likely to do this in situations where, for example, the

terrain, weather, and substrate are such that there is a risk of a pyrotechnic display causing fire to ignite outside of any exclusion zone in the area.

Communicating changes in fire seasons and restrictions or prohibitions

It's important that people planning to light fires in the open air know whether they can do so safely and legally. This means they need to know:

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

We notify our communities, stakeholders and partners of fire season changes and restrictions and prohibitions under <u>section 52</u> of the Act in several ways. These include:

- direct contact with our partners and stakeholders, including email
- local newspaper and radio ads
- social media and media
- email and text directly to permit holders
- on the Check It's Alright website <u>checkitsalright.nz</u>
- via information available by phoning 0800 658 628
- with fire danger or fire season signs we change these to reflect season status by adding 'Fire by permit only', 'Total fire ban' or similar messaging.

During periods of elevated and extreme fire danger days, we increase our communication of fire safety and prevention messages. This is to build awareness of the dangers of wildfires and promote positive behaviour changes. Since fire danger/fire risk conditions are locally specific, Districts will make local decisions about the best ways to communicate this to their communities.

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

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

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

Fire permits

The information included with a fire permit helps people understand how to light a fire safely and to reduce the risk of their fire burning out of control. Fire permits carry conditions which vary based on the type and size of the proposed fire, along with the current local fire risk conditions. To check and apply for a fire permit, visit <u>firepermit.nz</u>.

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

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

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

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

Council by-laws, regional plans, legal covenants, or restrictions

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

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

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

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

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

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

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

When a permit is needed

The need for a fire permit is based on the:

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

Fire types

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

- authorised (no permit required)
- permit required

For more information on fire types, see <u>Open air fires – rules and permits</u> on the Fire and Emergency website <u>www.fireandemergency.nz</u>.

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

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

Fire type	Description and conditions
Gas-operated appliances	Manufactured gas-operated appliances, such as barbecues, outdoor fireplaces, and outdoor gas heaters.
	Find out more about the safe use of Gas BBQs, cookers, and heaters.
Charcoal barbecues or grills	Barbecues or grills that use either charcoal briquettes or natural lump charcoal as their fuel source.
	Conditions
	 Don't use on an apartment balcony, deck, under a roof overhang or within other enclosed areas.
	 You must have a suitable way to extinguish the fire within easy reach – a maximum of 5 metres away.
	You must not leave the fire unsupervised while burning
	If you cannot meet this condition, you must apply for a permit.
Open-top liquid fuel cooker	Examples include (but are not limited to) portable smokers.
	These are usually small portable cooking devices that are liquid-fuelled with an open fuel container either under or in the cooking device.
	Conditions
	Must be on a non-combustible area/base.
	 You must have a suitable way to extinguish the fire within easy reach – a maximum of 5 metres away.
	• Don't light your fire within 3 metres of any part of a building, hedge, shelter belt or any other combustible material.
	You must not leave the fire unsupervised while burning.
	If you cannot meet these conditions, you must apply for a permit.
Non-pressurised liquid-fuelled	Examples include (but are not limited to) frost pot, smudge pot, diesel heater.
heaters	Usually fuelled by diesel, vegetable oil, kerosene, or waste oil.
	Conditions
	 Must be at least 3 metres clear of any part of a building, hedge, shelter belt or any other combustible material.
	 Must be placed on a non-combustible surface, not directly on grass or wooden decks.
	• You must not use the heater in small, confined areas.
	If refuelling, ensure heater has cooled down before refilling.
	You must not leave the fire unsupervised while burning.
	If you cannot meet these conditions, you must apply for a permit.
Permanent outdoor fireplace Wood-fired pizza oven/wood	Purpose-built or manufactured woodburning fireplace/wood oven with an open front and a vertical smoke vent/chimney.
oven	Generally constructed of concrete, concrete blocks, stone, or bricks, fixed in place (not mobile/movable).
	Usually in home outdoor entertaining areas.
	Conditions
	• Must have a non-combustible hearth or base that extends a minimum of 500 mm either side of the left and right edges and a minimum of 1 metre from the front edge of the fire box. This is to stop any burning material falling from the fire box landing onto anything combustible.

Fire type	Description and conditions
	• Smoke vent/chimneys must have a purpose-built manufactured cap, or maximum of 5 millimetre steel mesh fitted in the top to stop any hot ash or embers from escaping.
	• Firewood storage must be in areas not affected by heat from the fire and clear of any possible hot ash or ember-affected areas.
	 You must have a suitable way to extinguish the fire within easy reach – a maximum of 5 metres away.
	You must not leave the fire unsupervised while burning, or
	• It must have a solid or mesh screen/door that prevents any burning material from escaping the fire box.
	• Fireplaces with external construction made of steel must be at least 1 metre clear of any part of a building, hedge, shelter belt or any other combustible material.
	If you cannot meet these conditions, you must apply for a permit.
Movable/	Examples include (but are not limited to) chiminea.
portable free-standing front- loading fireplace.	A freestanding front-loading fireplace or oven, usually with a bulbous body – usually has a vertical smoke vent or chimney.
	Conditions
	• Don't light your fire within 3 metres of any part of a building, hedge, shelter belt or any other combustible material.
	 You must have a suitable way to extinguish the fire within easy reach – a maximum of 5 metres away.
	You must not leave the fire unsupervised while burning or
	 It must have a solid or mesh screen/door that prevents any burning material from escaping the fire box.
	If you cannot meet these conditions, you must apply for a permit.
Cultural cooking fires	If you cannot meet these conditions, you must apply for a permit. Conditions
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Cultural cooking fires Braziers Fire pits/bowls	 If you cannot meet these conditions, you must apply for a permit. Conditions Examples include hāngī, umu and lovo. Conditions Your fire area must be less than 4 square metres. Don't light your fire within 5 metres of any part of a building, hedge, shelter belt or any other combustible material. You must have a suitable way to extinguish it within easy reach – a maximum of 5 metres from your cultural fire. You must not leave the fire unsupervised while burning. On completion of cooking or the purpose required for cooking food the fires must be extinguished. If you cannot meet these conditions, you must apply for a permit. Find out more about the safe use of <u>Cultural cooking fires</u>. Brazier: a container for hot coals – usually an upright standing or hanging metal bowl or box.
Cultural cooking fires Cultural cooking fires Braziers Fire pits/bowls (Recreational)	 If you cannot meet these conditions, you must apply for a permit. Conditions Examples include hāngī, umu and lovo. Conditions Your fire area must be less than 4 square metres. Don't light your fire within 5 metres of any part of a building, hedge, shelter belt or any other combustible material. You must have a suitable way to extinguish it within easy reach – a maximum of 5 metres from your cultural fire. You must not leave the fire unsupervised while burning. On completion of cooking or the purpose required for cooking food the fires must be extinguished. If you cannot meet these conditions, you must apply for a permit. Find out more about the safe use of <u>Cultural cooking fires</u>. Brazier: a container for hot coals – usually an upright standing or hanging metal bowl or box. Fire pit/bowl: a pit dug in the ground, made from stone, brick or metal, or a bowl on an upright stand.
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Cultural cooking fires Cultural cooking fires Braziers Fire pits/bowls (Recreational)	 If you cannot meet these conditions, you must apply for a permit. Conditions Examples include hängī, umu and lovo. Conditions Your fire area must be less than 4 square metres. Don't light your fire within 5 metres of any part of a building, hedge, shelter belt or any other combustible material. You must have a suitable way to extinguish it within easy reach – a maximum of 5 metres from your cultural fire. You must not leave the fire unsupervised while burning. On completion of cooking or the purpose required for cooking food the fires must be extinguished. If you cannot meet these conditions, you must apply for a permit. Find out more about the safe use of <u>Cultural cooking fires</u>. Brazier: a container for hot coals – usually an upright standing or hanging metal bowl or box. Fire pit/bowl: a pit dug in the ground, made from stone, brick or metal, or a bowl on an upright stand. Conditions Your fire area must be less than 1 square metre. Where hot embers/ash are able to escape, there must be a non-combustible
Cultural cooking fires Cultural cooking fires Braziers Fire pits/bowls (Recreational)	 If you cannot meet these conditions, you must apply for a permit. Conditions Examples include hāngī, umu and lovo. Conditions Your fire area must be less than 4 square metres. Don't light your fire within 5 metres of any part of a building, hedge, shelter belt or any other combustible material. You must have a suitable way to extinguish it within easy reach – a maximum of 5 metres from your cultural fire. You must not leave the fire unsupervised while burning. On completion of cooking or the purpose required for cooking food the fires must be extinguished. If you cannot meet these conditions, you must apply for a permit. Find out more about the safe use of <u>Cultural cooking fires</u>. Brazier: a container for hot coals – usually an upright standing or hanging metal bowl or box. Fire pit/bowl: a pit dug in the ground, made from stone, brick or metal, or a bowl on an upright stand. Conditions Your fire area must be less than 1 square metre. Where hot embers/ash are able to escape, there must be a non-combustible base/tray that will contain these hot embers or ash, to prevent any risk of fire escaping.

Fire type	Description and conditions
	• You must have a suitable way to extinguish it within easy reach – a maximum of 5 metres from your brazier or fire pit/bowl.
	You must not leave the fire unsupervised while burning.
	If you cannot meet these conditions, you must apply for a permit.
Manufactured or drum incinerators	A drum or container, with a mesh or solid lid designed to prevent the escape of hot ash or fire, often with a vertical smoke vent or chimney; designed exclusively for incineration.
	Conditions
	• Don't light your fire within 5 metres of any part of a building, hedge, shelter belt or any other combustible material.
	 You must have a suitable way to extinguish it within easy reach – a maximum of 5 metres from your incinerator.
	 Smoke vent/chimneys must have a purpose-built manufactured cap or maximum of 5-millimetre steel mesh fitted in the top to stop any hot ash or embers from escaping.
	If you cannot meet these conditions, you must apply for a permit.

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

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

Fire type	Description and conditions
Gas-operated appliances	Manufactured portable gas-operated appliances, such as butane tramping stoves, gas barbeques and outdoor gas heaters. Find out more about the safe use of <u>barbeques and gas cylinders</u> and <u>outdoor</u> gas-operated appliances.
	Conditions
	The gas-fire must not be:
	 lit if the appliance is not in full operational condition in accordance with the manufacturer's specifications
	 lit unless on a flat, level surface, stable and solid enough to support the weight of the appliance plus any containers and food used during cooking
	lit unless at least one metre clear of all combustible material
	 lit in conditions where wind or other factors may cause the fire to spread to surrounding flammable material
	left unsupervised while flame is present.
Pressurised liquid appliances	Manufactured portable liquid cookers which use liquid under pressure to fuel the cooker. The type of liquid is not specific (e.g. White spirits, kerosene, or methylated spirits) but the delivery mechanism is.
	Note: This excludes <u>cookers using an open top, non-pressurised system</u> .
	Conditions
	The pressurised liquid fire must not be:
	 lit if the appliance is not in full operational condition in accordance with the manufacturer's specifications

Fire type	Description and conditions		
	 lit unless it is on a flat, level surface, stable and solid enough to support the weight of all the appliance parts plus any containers and food used during cooking lit unless at least one metre clear of all combustible material lit in conditions where wind or other factors may cause the fire to spread to surrounding flammable material left unsupervised while flame is present and/or the liquid is still turned on. 		
Campfires in a	Positioned and constructed by the Department of Conservation (DOC) to		
permanent fireplace	minimise the threat of fire spread and located within formally established DOC overnight campsites or daytime amenity areas.		
	Conditions		
	The campfire in a permanent fireplace must not be:		
	 lit if the fireplace has any damage that could allow the fire, hot embers, or ash to escape and spread beyond the constructed fireplace 		
	within three metres of any combustible material		
	 lit where notices and advertising are present which specifically prohibit the lighting of fires 		
	Iit during a prohibited fire season		
	 lit in conditions where wind or other factors may cause the fire to spread to surrounding flammable material 		
	 left unsupervised while burning and without the ashes being fully extinguished 		
	• used to burn rubbish.		
Cooking and warming fires	Small, open outdoor wood-burning fires are only permitted to be lit on PCL in remote areas and only if required for essential cooking or survival purposes. As a guide, remote areas for this purpose are considered to be at least 3km from the nearest public road, public vehicle easement accessway or publicly accessible jetty or wharf.		
	Additionally, fires must not be lit in locations fitting the freedom camping criteria, as defined in the Freedom Camping Act (2011).		
	Conditions		
	The cooking and warmth fire must not be:		
	• more than 0.5 m diameter x 0.5 m height (including wood and flames)		
	 within three metres of any tree or any place underneath overhanging vegetation; and 		
	 within three metres of any log or any dry vegetation 		
	• lit unless and until the ground surface within three metres of the site of the fire has been cleared of all combustible material		
	 lit where notices and advertising are present which specifically prohibit the lighting of fires or specify the lighting of fires only in other types of receptacles or places 		
	 lit where notices and advertising are present which specifically prohibit the lighting of fires or specify the lighting of fires only in other types of receptacles or places lit in National Parks which have bylaws prohibiting the lighting of wood burning fires in the open air 		

Fire type	Description and conditions		
	 lit in conditions where wind or other factors may cause the fire to spread to surrounding flammable material 		
	left unsupervised without the ashes being fully extinguished		
	• used to burn rubbish.		
	Note: This only applies to small open fires (as described above). Solid fuel fires, front loaded portable fires, non-gas barbecues or chimineas are all prohibited fire types on Public Conservation Lands at all times.		
	Find out more about the safe use of <u>campfires</u> .		

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

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

Fire type	Description and conditions	
Gas-operated appliances	Manufactured gas-operated appliances, such as barbecues, gas outdoor fireplaces and outdoor gas heaters. Conditions Find out more about the safe use of <u>Gas BBQs, cookers, and heaters</u> .	
Charcoal barbecues or grills	Barbecues or grills that use either charcoal briquettes or natural lump charcoal as their fuel source.	
	Conditions	
	 Don't use on an apartment balcony, deck, under a roof overhang or within other enclosed areas. 	
	 You must have a suitable way to extinguish the fire within easy reach – a maximum of 5 metres away. 	
	• You must not leave the fire unsupervised while burning.	
	If you cannot meet these conditions, you must apply for a permit.	
Open top liquid fuel cooker	Examples include (but are not limited to) portable smokers.	
	These are usually small portable cooking devices that are liquid-fuelled with an open fuel container either under or in the cooking device.	
	Conditions	
	Must be on a non-combustible area/base.	
	 You must have a suitable way to extinguish the fire within easy reach – a maximum of 5 metres away. 	
	• Don't light your fire within 3 metres of any part of a building, hedge, shelter belt or any other combustible material.	
	You must not leave the fire unsupervised while burning.	

Fire type	Description and conditions		
Non-pressurised liquid-fuelled heaters	Examples include (but are not limited to) frost pot, smudge pot, diesel heater. Usually fuelled by diesel, vegetable oil, kerosene, or waste oil.		
	Conditions		
	• Must be at least 3 metres clear of any of any part of a building, hedge, shelter belt or any other combustible material.		
	• Must be placed on a non-combustible surface, not directly on grass or wooden decks.		
	• You must not use the heater in small, confined areas.		
	If refuelling, ensure heater has cooled down before refilling.		
	You must not leave the fire unsupervised while burning.		
	If you cannot meet these conditions, you must apply for a permit.		
Permanent outdoor fireplace Wood-fire pizza oven/wood	Purpose-built or manufactured woodburning fireplace/wood oven with an open front and a vertical smoke vent/chimney.		
oven	Generally constructed of concrete, concrete blocks, stone, or bricks, fixed in place (not mobile/movable).		
	Usually in home outdoor entertaining areas.		
	Conditions		
	• Must have a non-combustible hearth or base that extends a minimum of 500 mm either side of the left and right edges and a minimum of 1 metre from the front edge of the fire box. This is to stop any burning material falling from the fire box landing onto anything combustible.		
	 Smoke vent/chimneys must have a purpose-built manufactured cap, or maximum of 5 millimetre steel mesh fitted in the top to stop any hot ash or embers from escaping. 		
	• Firewood storage must be in areas not affected by heat from the fire and clear of any possible hot ash or ember-affected areas.		
	 You must have a suitable way to extinguish the fire within easy reach – a maximum of 5 metres away. 		
	You must not leave the fire unsupervised while burning, or		
	• It must have a solid or mesh screen/door that prevents any burning material from escaping the fire box.		
	• Fireplaces with external construction made of steel must be at least 1 metre clear of any of any part of a building, hedge, shelter belt or any other combustible material.		
	If you cannot meet these conditions, you must apply for a permit.		
Movable/ portable free-standing front- loading fireplace.	Examples include (but are not limited to) chiminea.		
	A freestanding front-loading fireplace or oven, usually with a bulbous body – usually has a vertical smoke vent or chimney.		
	Conditions		
	 Don't light your fire within 3 metres of any part of a building, hedge, shelter belt or any other combustible material. 		
	• You must have a suitable way to extinguish that will easily reach it, a maximum of 5 metres away.		
	You must not leave the fire unsupervised while burning or		
	• It must have a solid or mesh screen/door that prevents any burning material from escaping the fire box.		
	If you cannot meet these conditions, you must apply for a permit.		

Fire type	Description and conditions		
Cultural cooking fires	Examples include hāngī, umu and lovo.		
	Conditions		
	• Your fire area must be less than 4 square metres.		
	• Don't light your fire within 5 metres of any part of a building, hedge, shelter belt or any other combustible material.		
	• You must have a suitable way to extinguish it within easy reach – a maximum of 5 metres from your cultural fire.		
	You must not leave the fire unsupervised while burning.		
	• On completion of cooking or the purpose required for cooking food the fires must be extinguished.		
	If you cannot meet these conditions, you must apply for a permit.		
	Find out more about the safe use of cultural cooking fires –fireandemergency.nz > <u>Traditional or cultural use of fire</u> .		

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

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

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

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 <u>section 52</u> of the Act but the fire or activity is necessary to prevent, reduce, or overcome any hazard to life or because of any other serious emergency.

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

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

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

- Where AFB is discovered, beekeepers have an obligation within 7 days of becoming aware of that case to destroy all honeybees, bee products, and appliances associated with that infected honeybee colony by burning.
- If it's a PROHIBITED fire season Fire and Emergency New Zealand will promptly (24hrs) produce a District Manager-approved special Fire Permit to Burn during a prohibited season, under biosecurity emergency response status.

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

Applying for a permit

To check if a fire permit is required, use the website <u>checkitsalright.nz.</u> If you need a permit, this site will automatically take you to the fire permits website.

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

- online through Fire and Emergency's fire permitting system <u>firepermit.nz</u>
- 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 <u>fire permit application form</u>. 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 onsite inspection of the burn location is required before deciding to grant or refuse the fire permit.

Note: Where an application has multiple burn locations, they must consider each location.

The assessor must inspect a permit applications if:

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

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

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

Prescribed burn plans may be required for complex and higher-risk burns, e.g. land clearing. They help the person proposing to burn to:

- go through a planning process
- consider how to undertake the proposed fire safely.

The applicant is responsible for developing the <u>prescribed burn plan</u>. However, we can advise them what the plan should contain to carry out the proposed fire safely.

Mandatory conditions

Every permit must contain standard conditions that are required by the <u>Fire and Emergency New Zealand</u> (<u>Fire Permits</u>) <u>Regulations 2017</u> and cannot be removed. These are:

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

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

 immediately before lighting a fire you must make reasonable efforts to confirm that no restricted or prohibited fire season under <u>section 56</u> (1) of the Act is in place in the location of the fire. Use <u>Checkitsalright.nz</u>.

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

- notify us before lighting the fire using the text code or email links provided or at <u>https://www.firepermit.nz/FENZ/Default.aspx</u>.
- call Southern fire communications on 03 341 0266.

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

For example, where the fire:

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

During an open fire season, you can notify us by contacting the <u>fire communications centre</u>, or preferably by clicking **Lighting a fire in an open season** on <u>firepermit.nz</u> and completing the **Permit Activation** form.

These notifications are flagged within the call centre system, so if they get a 111 call, it's clear there is a permitted/controlled fire.

Firebreaks

Fire and Emergency has the authority under <u>section 62</u> 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, or strips of lower flammability or removing all vegetation down to mineral earth.

Sections <u>63–68</u> of the Act explain appeal provisions and compliance pathways.

We use our <u>Firebreaks policy and guideline</u> to apply the relevant science-based calculation to check if a fire break is the right solution. The policy guides us on working closely with affected landholders to work towards a voluntary solution.

Fire and Emergency has powers to:

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

Note: This power relates to making and clearing firebreaks outside of incident response – before a fire happens. Our powers during response in <u>section 43</u> allow us to create firebreaks as needed to prevent the spread of fire.

Fire hazard removal

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

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

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

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

Reporting fire hazards

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

To do this:

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

Assessment of fire hazards

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

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

- it is appropriate for us to exercise our fire hazard removal powers under sections 65–68 of the Act
- it is more appropriate to educate the complainant or occupier/owner of the location of the potential fire hazard on how to mitigate risks from fires
- to refer the matter to another jurisdiction
- no further action is required.

Initial review

The assessor starts by answering four key questions:

- Is the potential hazard:
- trees close to power lines, or
 - hoarding inside a building?

If yes, then the hazard is referred to the relevant lines company or local council for action.

Is the material involved likely to pose a risk to life or property through ignition without spreading? This
covers fuel types that are likely to endanger adjacent or downwind properties (either through creating

significant health concerns or possible contamination damage), without spreading. This could be due to smoke toxicity or high intensity of burning.

- Is there sufficient material of appropriate type and composition to support a fire spreading to adjacent property or values? This captures the spread potential, taking into consideration the physical properties of the fuel as well as the general topography and onsite conditions. That includes continuity, size and shape, fuel load and flammability, as well as likely direction of fire travel.
- Is the burning material likely to produce enough heat to cause damage to property? Gives consideration to the fire having sufficient energy to actually cause damage to property if spread to it, or to compromise the health of property users.

Risk assessment matrix

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

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

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

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

Score	Next course of action
1-5	No further action.
6, 8, 9	Consider providing information/education to occupier/owner/complainant on how to mitigate risks from fire.
10, 12	Provide information/education to occupier/owner/complainant on how to mitigate risks from fire.
15, 16	Consider issuing a <i>Fire hazard removal notice (s 65)</i> , otherwise provide information/education to the occupier/owner /complainant on how to mitigate risks from fire.
20, 25	May issue a voluntary compliance letter citing a timeframe to meet that compliance. Failure to comply means the assessor must issue a <i>Fire hazard removal notice (s 65)</i> . Consider if an <i>Imminent danger notice (s 68)</i> is appropriate.

Outcomes from the fire hazard assessment

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

1. No further action, because the vegetation or other thing does not present a fire hazard, or imminent danger. The matter may be referred to another agency, such as the local council if appropriate, e.g. hoarding or vermin infestation.

- 2. Providing education and information to the occupier or owner of the land, and/or to the complainant, on how to mitigate any risks from fire. We would do this where the notice threshold has not been reached but the assessment indicates that proactive action would be helpful.
- 3. Giving the occupier or owner of the land the opportunity to voluntarily mitigate the risk within an appropriate time period. We would do this if the threshold for issuing a Fire hazard removal notice (section 65) has been met. If the occupier or owner won't do this voluntarily, we will issue them with a Fire hazard removal notice (section 65). This notice gives them one month to remove or destroy the vegetation or other thing increasing the risk of the outbreak or spread of fire.
- 4. Give the owner or occupier of the land verbal notice that we are taking immediate action to remove or destroy any vegetation or other thing on the land that is a source of imminent danger under <u>section 68</u>. We would only use this power when there is an 'almost certain' likelihood of a fire starting or spreading at any moment that would put life or property at risk.

Note: We will use this power very rarely.

Powers of entry

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

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

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

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

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

Fire hazard removal notice (section 65)

A fire hazard removal notice (<u>section 65</u>) is formal written notification under <u>section 65</u> of the Act to an occupier or owner of land that they must remove or destroy the 'vegetation or other thing' that we've assessed as meeting the threshold for issuing a notice.

The notice:

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

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

The occupier of the land where the fire hazard is located is primarily responsible for removing or destroying it. If the land is unoccupied, then the responsibility passes to the owner of the land.

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

Imminent danger notice (section 68)

An Imminent danger notice is verbal notification under <u>section 68</u> 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 <u>section</u>
 <u>68</u> 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 <u>sections</u> <u>42 and 43</u> 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 <u>Risk</u> <u>Reduction Strategy</u>, supported by a Regulatory compliance policy. Our <u>Regulatory compliance guide</u> has details of our approach to compliance.

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

If there are cases of serious or repeated non-compliance, we may use infringement notices or prosecute. For more information on our regulatory compliance policies and procedures and other relevant topics, visit <u>Regulatory compliance</u>.

Contact Fire and Emergency

In case of an emergency please call 111

General enquiries and questions

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

Submit a general enquiry or question or call 04 496 3600.

Lodge a complaint

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

Fire hazards

- Complete this online form
- You can also call the Regulatory Compliance Group on 0800 336 942.

Local contacts for this plan

To communicate with the District team for this fire plan please email <u>HawkesBayDistrictRRTeam@fireandemergency.nz</u>
Glossary

4Rs – Reducing risk, ensuring response readiness, providing emergency response and making coordinated efforts to enable recovery following an emergency.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Land use - How the land is used - e.g. primary production (farming), forestry, residential, industrial.

Local area – The area within the boundaries of a local advisory committee that are set in accordance with <u>section 16</u> of the Act.

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

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

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

Scientific Reserves – Per the <u>Reserves Act 1977</u>, 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.

Te Matau-a-Māui /Hawkes Bay 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. For an explanation of how these fire permit zones relate to our fire control zones see the <u>Zones information</u> below



Area overview

Geography

For this fire plan, the boundaries are those of the Hawkes Bay Local Advisory Committee, which incorporates the Hawkes Bay Regional Council area, the eastern area of the Manawatu-Whanganui Regional Council and a very small section of the Northeastern part of the Greater Wellington Regional Council. There are five separate Territorial Authorities that are in Te Matau-a-Māui /Hawkes Bay District.

For the purpose of this Fire Plan, and to avoid confusion with the term "District", the five separate Territorial Authorities will be referred to as a "Province". With the Napier and Hastings Territorial Authorities being combined in to one Province.

Te Matau-a-Māui/Hawke's Bay stretches from Māhia Peninsular in the north to Eketāhuna in the south, the main North Island divide (Tararua, Ruahine, Kaweka ranges and Te Urewera) in the west to the Pacific Ocean in the east.

Territorial Local Authority	Land Area (ha)
Central Hawkes Bay District	333,300
Hastings District	522,671
Napier City	1,800
Tararua District	436,465
Wairoa District	413,000

The total land area for Te Matau-a-Māui /Hawkes Bay is 1,707,236ha

The entire area has a mix of both dense and sparsely populated areas. Major transport routes dissect the province including State Highways 2, 3, 5, 50 and 51, as well as the East Coast Rail link.

The area's geography incorporates inland ranges, basins, fertile plains, high country, coastal lowlands and hills, islands, and beaches. The complex topography of the fire plan area means that we have separated the area into several zones, as there are significant climatic deviations.

Peri-urban small block owners are developing in the rural hill country around the major towns and cities, creating an increased fire risk at the urban and rural interface.

The district sits over multiple fault lines. The Hikurangi Trench sits off the coast of the entire Te Matau-a-Māui /Hawkes Bay District. Some of the more significant fault lines are Mohaka, Makuri-Waewaepa, Ruahine, Kaweka, and Wellington. Each of these faults could cause a severe earthquake. Risks associated with this could result in severe impacts on business continuity and operational capability, including isolation, road closures, liquefaction, slips, bridge collapse and risk of fire due to utility services failure.

Climate/weather The climate of Hawke's Bay is influenced largely by the orography (geography dealing with the formation and features of mountains/ranges) and the airstreams crossing Aotearoa New Zealand.

It is a region of highly variable and sporadic rainfall, and large and occasionally sudden temperature variations.

Hawke's Bay is a sunny region with most areas having over 2000 hours per year. The region is less windy than many other coastal areas of New Zealand, experiencing very

light winds. Consequently, a large number of frosts occur during the cooler months of the year. Much of the rain in Hawke's Bay occurs when the wind directions are predominantly easterly or southerly.

Rainfall is extremely variable in spring and summer when westerly winds prevail over the country. In most years insufficient rainfall (dry spells) results in a total depletion of soil moisture to the extent that plant growth ceases. The high-country areas of Hawke's Bay are exposed, and gales occur frequently.

Showers of snow are frequent during the winter months in cold southerly conditions.

The Tararua and Rimutaka ranges have a large influence on the climate of the Ruamāhanga catchment. The ranges shelter the lowland plains from the predominantly westerly weather systems, and during summer this can cause high temperatures and dry weather.

Wind

Local winds in Hawke's Bay are largely influenced by the orography, and the region is less windy than many other coastal areas of New Zealand. Sheltering effects by the western ranges results in a high frequency of calm or very light winds. This effect is most pronounced at night-time and in winter under clear weather conditions.

Throughout the region there is a tendency for the wind to be channelled along river valleys. Over central and southern Hawke's Bay the predominant directions are from the west or southwest along the Heretaunga and Takapau Plains. In the north the wind tends to blow most frequently from the north or northwest.

Spring is generally the windiest season throughout the region. Because of the relatively high frequency of light winds in lowland regions there is only a small seasonal variation, although winter and spring tend to be windier than other times of the year.

Hawkes Bay is exposed to severe equinoctial gales (gales around the time of the two equinoxes) and hot, dry fohn winds.

Rainfall

Rainfall patterns in the region are closely related to elevation, and exposure to the predominant air flows (westerly, south-westerly, and north-easterly). Areas with high annual rainfall over 2000 mm (Ruahine, Kaweka, and Huiarau Ranges) provide a stark contrast to areas which receive around less than 800 mm of rain per year, that is the area just north of Napier to south of Waipukurau, including the Heretaunga and Takapau Plains.

Meteorological systems bringing rain to Hawke's Bay are irregular, causing high rainfall variability both in time and space. Nearly all the rain is associated with cold fronts, and falls, as showers of relatively short duration.

Rain day frequency increases towards the high country, with over 160 days in the foothills of the ranges. The frequency of rain days is greatest during winter months (about 30% of total) and least in summer (20% of total). Rain is frequently heavier and more intense in the high country than elsewhere. Napier receives heavy rains (over 25mm) on about seven days per year, whereas Kaweka Forest records 13 days per year with rainfall totals over 25mm.

Heavy rainfalls can occur in Hawke's Bay with southerly and easterly flows, as well as when ex-tropical depressions pass near the region. Intense rainfalls also occur with thunderstorms.

Periods of fifteen days or longer with less than 1 mm of rain on any day are referred to as dry spells. Dry spells are common in Hawke's Bay during late spring, summer, and early autumn. There is an average of 3.5 such periods each year in Napier, 2.6 in Ongaonga, and 1.7 in Wairoa. The average duration of a dry spell is about 19 days.

When westerly frontal rainfall systems pass over the Tararua region, the ranges receive high rainfall but a 'rain shadow' occurs east of the range in the Ruamāhanga valley. Similarly, the ranges influence rainfall distribution during south-easterly (often extropical cyclone) rainfall events: orographic enhancement of the air masses, as they are forced up and over the Tararua Range, can result in very heavy rainfall within the Ruamāhanga valley.

Air Temperature

In general, the Heretaunga and Takapau Plains experience warm afternoon temperatures of at least 23°C in summer, and cold winter night temperatures of 3-5°C. Along the coast, maximum temperatures are higher than in the hill country. Minimum temperatures are also warmer than further inland due to the modifying influences of Hawke's Bay and the Pacific Ocean.

Low-lying 24 areas around the coast and Heretaunga Plains have a median annual temperature of around 13.5°C, whereas the inland ranges experience median annual temperatures of about 8°C. Air temperatures decrease with height above sea level by about 0.6°C for each 100 m increase in elevation.

Hawke's Bay, like other regions east of the main ranges, can experience sudden and large temperature changes. Daily temperature ranges are larger than are found in western areas of New Zealand. The daily range of temperature, i.e., the difference between the maximum and the minimum, is smaller at the coast (e.g. Napier and Wairoa) than in sheltered inland areas (e.g. Waipukurau). However, in the ranges the daily variation is also influenced by cloudiness and elevation; the higher the elevation and cloudier the conditions, the smaller the temperature range (e.g., Waikaremoana).

With the prevailing wind direction over New Zealand being westerly, high temperatures resulting from the dry foehn winds in the lowland areas are not uncommon, and summertime temperatures frequently rise above 25°C.

The Ruamāhanga2 catchment (Tararua) has a temperate climate grading towards a Mediterranean climate in the central valley – i.e., warm, dry summers and cold winters. Average maximum temperatures range from around 12°C in July up to around 24°C in January and February; however, during extreme conditions (such as when warm, dry 'foehn' winds blow across the Tararua Range) temperatures may exceed 30°C. Frosts are frequent during winter and can also occur in autumn and spring.

Sunshine

The extensive sheltering by the western high country from the prevailing westerly winds, makes much of Hawke's Bay a very sunny region. Bright sunshine hours are highest at and near the coast (more than 2200 hours recorded annually in these areas), and sunshine totals decline further inland. Increased cloudiness in the high country reduces the amount of sunshine, and less than 1850 hours per year are common in the Ruahine Ranges.

Drought

Occasional droughts have been a feature of the Hawke's Bay climate since pastoral farming began, but the 2020 drought was one of the most severe in recent times and appeared to catch some farmers by surprise.

The official NZ Drought Index appeared to understate the true severity of recent droughts in the region and forecasts indicate the likelihood of more frequent and severe droughts in the future.

Given climate forecasts of more frequent and intense droughts in the future, encouraging at-risk farmers to adopt some of the more successful approaches adopted by other farmers could avoid some of the substantial economic costs and mental health related costs with future droughts. Such changes would make more farmers, small block holders, their sector and indeed the region, more drought resilient.

Climate change

The following information in this subsection derives from environment.govt.nz

Projections of climate change depend on future greenhouse gas emissions, which are uncertain.

Compared to 1995, temperatures are likely to be 0.7°C to 1.1°C warmer by 2040 and 0.7°C to 3.1°C warmer by 2090. By 2090, the Hawke's Bay is projected to have from 8 to 51 extra days per year where maximum temperatures exceed 25°C. The number of frosts could decrease by up to 15 days per year in the Hawke's Bay by 2090.

Rainfall will vary locally within the region. The largest changes will be for particular seasons rather than annually. Winter rainfall is projected to decrease by 2 to 17 per cent in Napier by 2090. Spring rainfall is projected to decrease by 2 to 13 per cent in Napier by 2090. However, summer and autumn rainfall are both expected to increase.

According to the most recent projections, the Hawke's Bay region is not expected to experience a significant change in the frequency of extreme rainy days because of climate change.

The frequency of extremely windy days in Hawke's Bay by 2090 is not likely to change significantly. There may be an increase in westerly wind flow during winter and north-easterly wind flow during summer.

Future changes in the frequency of storms are likely to be small compared to natural inter-annual variability. Some increase in storm intensity, local wind extremes and thunderstorms is likely to occur.

The frequency of ex-tropical cyclones is projected to either decrease or remain unchanged over the 21st century; however, they are likely be stronger and cause more damage as a result of heavy rain and strong winds.

Information sources

- 1. NIWA. (2013). The Climate and weather of the Hawke's Bay 3rd Edition
- 2. Hawkes bay regional Council <u>Climate change in Hawke's Bay</u>
- Greater Wellington Regional Council. (N.D). The Climate of the Ruamāhanga catchment
- Hawke's Bay District Council. (2021). Hawke's Bay Drought Resilience Strategy 2021-2026

By 2090, the region could expect*:

Spring

- 0.7°C to 2.8°C temperature rise in Hawke's Bay
- 2 to 13 per cent less rainfall in Napier

Summer

- 0.7°C to 3.1°C temperature rise in Hawke's Bay
- 4 per cent less to 16 per cent more rainfall in Napier

Autumn

- 0.7°C to 3.1°C temperature rise in Hawke's Bay
- 1 to 7 per cent more rainfall in Napier

Winter

• 0.7°C to 3.1°C temperature rise in Hawke's Bay

• 2 to 17 per less rainfall in Napier

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

Territorial Local Authority	Deprivation Index	Usual Resident Population	Age 0 to 9 %	Age 10 to 19 %	Age 20 to 64 %	Age 65 Over %
Central Hawkes Bay District	6.7	14,810	14.2	12.6	53.5	19.4
Hastings District	6.6	76,282	14.5	14.1	54.4	17.0
Napier City	6.4	66,997	13.0	12.7	54.5	19.5
Tararua District	7.9	17,887	14.3	13.4	54.3	18.4
Wairoa District	9.9	8,366	16.1	14.2	52.4	17.1
Hawkes Bay District	7.0	184,342	13.99	13.41	54.31	18.25

Data is Usually Resident Population (URP) from the Census 2018.

Demographic information

Territorial Local Authority	European NZer %	Māori %	Pacific %	Asian %	All Other Ethnicities %
Central Hawkes Bay District	84.02	23.98	2.76	2.35	1.57
Hastings District	71.72	27.81	8.28	5.86	1.77
Napier City	82.56	21.91	3.45	4.74	2.01
Tararua District	85.62	24.83	1.91	2.78	1.45
Wairoa District	48.29	65.71	3.39	2.22	1.02
Hawkes Bay District	76.94	26.94	5.24	4.70	1.79

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

The Te Matau-a-Māui /Hawkes Bay District has 11 fire season zones:

Wairoa Rural

Mahia Peninsula and Wairoa Coast

Heretaunga – Ahuriri (Hastings and Napier)

- Heretaunga Ahuriri
- Hawkes Bay Coast (Northern third of fire season zone)

Central Hawkes Bay

- Central Hawkes Bay Rural
- Hawkes Bay Coast

Tararua

- Tararua West
- Tararua Central
- Tararua East
- Tararua South
- Pahiatua
- Eketāhuna

The Tararua has been divided into seven zones. The fire weather for this area varies considerably from north to south, and east to west. With the predominant north-western wind flow having a major impact. The Eketāhuna Zone consists of Public Conservation Land and farmland in the foothills. This zone usually has a higher annual rainfall than the rest of the province.

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

All provinces in this fire plan have Public Conservation Land (Department of Conservation) which are controlled as a separate zone. Further information on how Public Conservation Land is managed is described within the Public Conservation Land Zones.

Frequency of elevated fire danger

- On average, this area experiences:
- 10.2 days of extreme fire danger
- 8.1 days of very high fire danger

Due to the significant variations in climate in the area, north to south and east to west, fire severity is quite varied.

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
2009	Mahia	Powerlines in trees
2012	Waitawhiti Road	Burn off re-ignition
2017	Lion's Fire	Powerlines in trees
2017	Dartmoor Road	Powerlines in trees
2017	Ripia	Discharge of burning materials
2017	Colin White Road	Farming Operations – Hot works
2017	Waimarama	Powerline Fault
2020	Brownrigg's	Farm Vehicle Discharge
2020	Tangoio	Forestry Machinery Discharge
2020	Wakarara Road	Powerline in trees
2020	State Highway 50	Farming Operations - Mowing

Schedule of stakeholders

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

When we say	What we mean is
Consult while amending plan	You will have the opportunity for input into the fire plan before it is released for public consultation. Can include workshops and other opportunities to contribute.
Public consultation	You will have the opportunity to comment during the 4-week public consultation period.
Consult during decision making	The plan to change to a prohibited fire season or use section 52 will be discussed with you before it is implemented.
Notify of decision	You will be contacted directly when there is a change to a prohibited fire season, or when section 52 is implemented.
Notify using public channels	You will find out about the change in fire season etc. the same way as other members of the public.
Notify via normal channels	This is relationship based, at either national or local level where existing relationships and engagement arrangements are used.

National-level stakeholders

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

Stakeholder	Fire plan development	Fire plan amendment	Fire season changes Restricted or prohibited. Moving to, or revoking	Section 52 fire prohibitions	Section 52 restrictions/ prohibitions on activities
Department of Conservation	Consulted while creating plan	Consult while amending plan	Consult during decision making	Consult during decision making	Consult during decision making
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	Fire season changes Restricted or prohibited. Moving to, or revoking	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
Transpower	Consulted while creating plan	Consult while amending plan	Notify of decision	Notify of decision	Consult during decision making

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

Area-level stakeholders

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

Stakeholder	Fire plan development	Fire plan amendment	Fire season changes Restricted or prohibited. Moving to, or revoking	Section 52 fire prohibitions	Section 52 restrictions/ prohibitions on activities
Department of Conservation	Consulted while creating plan	Consult while creating plan	Consult during decision making and notify of decision	Consult during decision making and notify of decision	Notify via email group
Ngati Kahungunu lwi Inc	Consulted while creating plan	Consult while creating plan	Consult during decision making and notify of decision	Consult during decision making and notify of decision	Notify via public channels
Forestry Companies	Consulted while creating plan	Consult while creating plan	Consult during decision making and notify of decision	Consult during decision making and notify of decision	Notify via email group
Public	Public consultation	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Hawke's Bay Local Advisory Committee	Consulted while creating plan	Consult while amending plan	Notify via public channels	Notify via public channels	Notify via public channels
Hawke's Bay Regional Council	Public consultation	Public consultation	Notify via email group	Notify via email group	Notify via email group
Horizons Regional Council	Public consultation	Public consultation	Notify via email group	Notify via email group	Notify via email group
Coordinating Executive Group (CEG)	Public consultation	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Emergency Services Coordinating Committee (ESCC)	Public consultation	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Port of Napier	Public consultation	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Napier Airport	Public consultation	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Eastland Network	Public consultation	Public consultation	Notify of decision	Notify of decision	Notify of decision

Stakeholder	Fire plan development	Fire plan amendment	Fire season changes Restricted or prohibited. Moving to, or revoking	Section 52 fire prohibitions	Section 52 restrictions/ prohibitions on activities
Unison Power	Public consultation	Public consultation	Notify of decision	Notify of decision	Notify of decision
Contact Energy	Public consultation	Public consultation	Notify of decision	Notify of decision	Notify of decision
Trust Power	Public consultation	Public consultation	Notify of decision	Notify of decision	Notify of decision
Central Lines	Public consultation	Public consultation	Notify of decision	Notify of decision	Notify of decision
Safer Hawke's Bay Strategic Groups	Public consultation	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Hawkes Bay Volunteer Brigades	Consult while amending plan	Consult while amending plan	Notify of decision	Notify of decision	Notify of decision
Heretaunga – Ahuriri (Hastings and Napier)	specific				
Hastings District Council	Public consultation	Public consultation	Notify via group email	Notify via group email	Notify via group email
Napier City Council	Public consultation	Public consultation	Notify via group email	Notify via group email	Notify via group email
Port of Napier	Public consultation	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Napier Airport	Public consultation	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Mahia peninsular and Wairoa coast specific					
Rongomaiwahine Iwi Inc	Public consultation	Public consultation	Consult during decision making and notify of decision	Consult during decision making and notify of decision	Notify via public channels
Firstlight Network	Public consultation	Public consultation	Notify via group email	Notify via group email	Notify via group email
Wairoa District Council	Public consultation	Public consultation	Notify via group email	Notify via group email	Notify via group email
Tararua specific	·	·	·	·	·
Tararua District Council	Public consultation	Public consultation	Notify via group email	Notify via group email	Notify via group email

Stakeholder	Fire plan development	Fire plan amendment	Fire season changes Restricted or prohibited. Moving to, or revoking	Section 52 fire prohibitions	Section 52 restrictions/ prohibitions on activities
Wellington Regional Council	Public consultation	Public consultation	Notify via group email	Notify via group email	Notify via group email
Powerco	Public consultation	Public consultation	Notify of decision	Notify of decision	Notify of decision
ScanPower	Public consultation	Public consultation	Notify of decision	Notify of decision	Notify of decision
Wairoa Rural specific					
Tūhoe lwi	Public consultation	Public consultation	Consult during decision making and notify of decision	Consult during decision making and notify of decision	Notify via group email
Wairoa District Council	Public consultation	Public consultation	Notify via group email	Notify via group email	Notify via group email

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

Central Hawkes Bay

Geography	Central Hawkes Bay extends from the Ruahine Range in the west to the coast in the east, and from Ōtāne in the north to Takapau in the south.				
Demographics	Refer to the <u>area overview</u> for demographics in this zone				
Climate/weather	The climate in this zone is almost	continental and i	s dominated by	the main divide.	
	There is seasonal dryness with dro dangers throughout summer with zone.	ought. Very hot d strong, dry west	lry periods creato erly fohn winds	e extreme fire dominating this	
	North easterly weather systems a	re usually dry an	d extend dry per	iods in the zone.	
	Coastal areas are especially susception from southerly systems that bring	otible to these w in coastal rain.	eather patterns	but do benefit	
Land cover/ land use	The predominant land use in this a the less drought prone areas. The	zone is dry stock re are some exte	farming with dai nsive areas of irr	iry farming in rigated cropping.	
	There are some areas of commerce	ial forestry, thou	igh these are not	t extensive.	
	In the built environment, there an commercial properties. Industrial	e developments zones feature in	comprising resid most towns.	ential and	
Industry	Industry	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures	
	Primary production, including horticulture and agriculture	\boxtimes	\boxtimes	\boxtimes	
	• use of machinery – sparks				
	 use of fire for land management relevant enerations affected 				
	 use of machinery – sparks relevant operations affected Use of firebreaks 				
	Apiculture (beekeeping)				
	Use of smoke				
	Use of fire to destroy infested hives				
	Meat Processing		\boxtimes		
	Impacted by restrictions on activities for suppliers				
	Horticultural Facilities				

_	 Impacted by restrictions on activities for suppliers 			
	 Tourism and recreation People unfamiliar with local fire risk and rules Access to locations may be 			
	• Access to locations may be restricted			
Lifeline utilities/other infrastructure	Lifeline utility/ other infrastructure	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures
	 Electricity transmission lines Sparking during high winds Use of auto-reclosers limited in high fire danger Recommended vegetation mitigation practices 			
	Railway lineSparks from passing trains and during track maintenance			
	 Roading network Sparks from vehicle malfunction. Spark causing activities during road maintenance and mowing 			
	 Natural gas distribution network Gas leaks Protected by own controls on use of fire and other activities in vicinity 			
	 Waipukurau Aerodrome 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 			
	Telecommunications networkProtect by applying controls to surrounding areas			×
Recreational locations	 Recreational locations that wi its fire control powers river tra Historic Homesteads 	ll be affected by ails around Waip	Fire and Emerge awa and Waipuk	ncy exercising urau
Cultural and	Historic Homesteads Tangata whenua have very strong	ties to their whe	enua (land) and c	ulture, and

activities and events

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

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

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

Cultural and recreational activities and events	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using of fire control measures
Nine Marae in this zoneCultural firesWāhi tapu and taonga			
 Fireworks Use may be prohibited during high fire danger Pyrotechnics managed by other approvals Higher fire risk over Christmas New Year Period and late summer 			
TrampingCampfiresAccess may be restricted during high fire danger			
 Hunting and Fishing Hunters singeing pigs Use of off-road vehicles – hot exhausts in long grass Campfires Increase in people without knowledge of fire risk or rules 			
 Various Concerts, Music Festivals and Private Functions Peri-urban locations High Fire Danger Season Pyrotechnics managed by other process Public use of fireworks may be restricted during high fire danger 			
 Matariki Celebrations Traditional Fires Fireworks Generally, in low-risk season 			

_	Various Cultural Events Peri-Urban locations 	\boxtimes	\boxtimes	
	High Fire Danger Season			
	Campfire and bonfires on the beaches			
– Special risk areas	Special risk area	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using of fire control measures
	Public conservation land			\boxtimes
	Ecological values at risk			
	In own zone to apply separate controls			
	Extensive small block properties around urban centres.High summer fuel loads			
	 Lack of understanding of the use of fire as a land management tool Restrictions on activities Peri-urban assets 			
	Events and concerts with bonfiresPeri-urban locationsHigh fire danger time of year			
	Areas and population centres east of State Highway 2 can become isolated in adverse weather or natural disaster events			
	 Heritage Buildings Generally wooden construction Difficult to protect Difficult to save if involved in fire Often in isolated locations 			
	 Central Hawkes Bay District Council Landfill Hot material waste disposal Lithium-Ion batteries disposed in the landfill Use of machinery -sparks Relevant operations affected Located in a summer dry area Close to peri-urban developments 			

	Fire tactical plans are prepared for high-risk operations, businesses and areas a identified by the Hawkes Bay Wildfire Threat Analysis.				
Known fire hazards	There are n Case Mana	There are no long-term fire hazards listed in this zone in the Fire Hazard Removal Case Management System.			
Frequency of elevated fire danger	 On average, this zone experiences: 13.7 days of extreme fire danger per fire season (Oct-May) 13 days of very high fire danger per fire season (Oct- May) Rural dwellers in this zone are used to dry summer conditions and are very aware of the risks from wildfires. They farm for summer dry conditions. 				
Fire history	The known fire history for this zone for significant wildfires or fires caused activities regulated by our fire control powers includes:				
	Year	Fire	Cause		
	2021	Takapau Stubble Burn (30ha)	Caused by mowing		
	2019	Wakarara Road	Powerlines		
	1991	Tikokino Fire (130ha)			
	Unwanted vegetation wildfires do occur as a consequence of:				
	• Using fi	re as a land management tool			
	Using fire for cooking, warmth, cultural or recreational purposes				
	Powerlines in trees or broken lines				
	Agricultural Machinery				
	Power Tools, Chainsaws				
	Pyrotec	hnics and fireworks			
Predominant fuel type	The predon	ninant fuel type in this zone is	a mixture of grassland and forestry.		

Thresholds

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

Grass Curing (GC%)	Build Up Index (BUI)			
(%)	≤39	40-59	≥60	
0-50	Open	Open/Restricted	Restricted/Prohibited	
50-70	Open/Restricted	Restricted	Prohibited	
>70	Restricted/Prohibited	Prohibited	Prohibited	

Interpreting this matrix:

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

In the Hawkes Bay fire environment, grasses are the main contributor to out of control fires on windy days, so a lower curing threshold is preferred. Fire Permitting mitigates the risk of fires in heavier fuel types providing for a higher BUI threshold.

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
activitiesLocalised 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.(section 52)Advice is excilable through the underite Checkbirgher to excitable through the underiver to excitable through the underite Checkbirgher to excitable through the underite Checkbirgher to excitable through the underiver to excitable through the underiver to excitable through the under the und

Advice is available through the website <u>Checkitsalright.nz</u> for when to avoid certain activities that pose a risk for causing a wildfire. Noting these are voluntary restrictions it is envisaged the majority of public will follow this, where there is an elevated risk or public are not following this advice, imposing prohibitions or restrictions on activities is a tool available to us.

Further information on Voluntary restrictions on high-risk activities for the whole of Te Matau-a-Māui / Hawke's Bay is available in <u>Appendix One</u> of this document.

Representative remote automated	The Remote Automated Weather Station (RAWS) used to determine whether				
weather	Gwavas	Takapau Plains	Pōrangahau		
stations	Te Apiti	Waipawa	Ongaonga		
	Wanstead	Kererū			
We will consider the forecast for these locations			declaring or revoking a fire		

season.



Heretaunga/Ahuriri – Hastings/Napier

Geography	This zone extends from the main divide of the northern Ruahine and Kaweka Ranges to the west to the east coast and from the Waikare River in the north to Ōtāne in the south. It includes the Heretaunga flood plains, coastal hill country, areas of steep limestone escarpments and clays with a Taupō pumice topsoil. This zone represents the major urban towns and city environments of Napier and Hastings including their respective suburbs, Bayview, Whirinaki, Whakatu, Clive, Haumoana, Te Awanga and Havelock North.
Demographics	Demographics help us understand how our communities use fire, and the type of support they might need and how we communicate with them.
	Refer to the area overview for demographics in this zone.
Climate/weather	Hawke's Bay has a temperate climate, however, can be vulnerable to extreme weather conditions.
	Summer period is extending each year with the number of days exceeding 25°C increasing. Hawke's Bay can also be prone to localised drought with extended periods of below average rainfall.
	Severe weather, especially cyclones from the tropics, can then bring significant rainfall resulting in landslips, high river and stream flows and localised flooding. Storms can also bring high seas, resulting in sea water inundation along the coast, property damage and erosion of beaches.
	It's not uncommon for strong wind warnings to be issued for Hawke's Bay, particularly across the exposed plains.
	Dominant northerly or nor westerly systems bring strong winds and hot, dry days that elevate the fire dangers to extreme, especially with the season equinox.
	Easterly patterns bring rain and occasional ex-tropical cyclones, and southerlies can bring some rain to the coastal areas but little elsewhere in the zone.
	This zone is prone to summer dryness and drought.
Land cover/	The main land use for the zone is pastoral farming, dairy, beef, lamb and deer.
land use	The Heretaunga Plains and surrounds supports a vibrant viticulture industry along with extensive areas of orchards and cropping.
	Commercial forestry supports the PanPac Mill and Napier Port.
	Built environment developments comprising residential and commercial properties. Industrial zones feature in most cities and towns.

Industry	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures
 Primary production, including horticulture and agriculture use of machinery – sparks use of fire for land management relevant operations affected 			
 Forestry use of machinery – sparks relevant operations affected Use of firebreaks 			
Apiculture (beekeeping)Use of smokeUse of fire to destroy infested hives			
 Tourism and recreation People unfamiliar with local fire risk and rules Increase in population Access to locations may be restricted 			
Commercial and industrial premises, including Meat processing and freezing work Industrial cool stores and packing sheds Use of machinery – sparks Impacted by restrictions on activities for suppliers			
 PanPac Timber Mill Use of machinery – sparks Relevant operations affected Impact from forestry operations stopping 			

Industry

Lifeline utilities/other infrastructure

Lifeline utility/ other infrastructure	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures
 Electricity transmission lines Sparking during high winds Use of Fire Danger Trigger Points Use of auto-reclosers limited in high fire danger Recommended vegetation mitigation practices 			
Railway lineSparks from passing trains and during track maintenance			
 Roading network Sparks from vehicle malfunction. Spark causing activities during road maintenance and mowing 			
 Natural gas distribution network Gas leaks Protected by own controls on use of fire and other activities in vicinity 			
 Hawkes Bay Airport 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 			
 Telecommunications network Protect by applying controls to surrounding areas 			
 Hastings Aerodrome 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 			

RecreationalRecreational locations that will be affected by Fire and Emergency exercising itslocationsfire control powers.

- City, District and Regional Council Parks, Reserves and Rest Areas
- Te Mata Peak Park, which has a Tactical Response Plan
- Whirinaki Mountain Bike Park
- Mohaka River Fishing and Rafting
- Ngaruroro River Fishing and Rafting
- Vineyards/Wineries for functions and events
- Public Concerts and Events
- Cycleways
- Beaches
- Sporting locations that may be impacted:
 - Mountain biking
 - Motorsport

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

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

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

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

Cultural and recreational activities and events	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using of fire control measures
25 Marae in this zone	\boxtimes	\boxtimes	
Cultural fires			
Wāhi tapu and taonga			
Fireworks	\boxtimes	\boxtimes	
 Use may be prohibited during high fire danger 			
 Pyrotechnics managed by other approvals 			
 Higher fire risk over Christmas New Year Period and late summer 			
 Tramping Campfires Access may be restricted during high fire danger 			

 Mountain biking, horse riding, back country running Access may be restricted during high fire danger 			
Hunting and Fishing	\square		
 Hunters singeing pigs 			
 Use of off-road vehicles – hot exhausts in long grass 			
Campfires			
Increase in people without knowledge of fire risk or rules			
Art Deco Weekend	\square	\boxtimes	
Large Visitor Numbers			
High Fire Danger time of year			
Spark hazardous activities			
Various Concerts, Music Festivals and Private Functions	\boxtimes	\boxtimes	
Peri-urban locations			
High Fire Danger Season			
Pyrotechnics managed by other process			
• Public use of fireworks may be restricted during high fire danger			
Matariki Celebrations	\boxtimes	\boxtimes	
Traditional Fires			
Fireworks			
Generally, in low risk season			
Various Cultural Events		\boxtimes	
Peri-Urban locations			
High Fire Danger Season			
Campfire and bonfires on the beaches			

Special risk areas	Special risk area	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using of fire control measures
	Public conservation land			\boxtimes
	 Ecological values at risk 			
	In own zone to apply separate controls			
	Heritage Buildings	\square		
_	Generally wooden construction			

	Difficult to protectDifficult to save if involved in fire				
	Tyre Dump at Whakatu Has tactical response plan 				
	Tyre Dump at Tangoio Located in peri-urban area 				
	 Seasonal Worker Accommodation Supports the horticulture sector Required for business continuity for the processing sector 				
	 Sector Omarunui Landfill Hot material waste disposal Lithium-Ion batteries disposed in the landfill Use of machinery -sparks Relevant operations affected Located in a summer dry area Close to peri-urban 				
	 developments Te Mata Peak Park High Fuel Load High Public Use Restrictions on activities Area is wāhi tapu and a taonga 				
	Napier, Bluff and Napier Hill Interface risk 				
	Fire Tactical Plans are prepared for high-risk operations, businesses and areas as identified by the Hawkes Bay Wildfire Threat Analysis.				
Known fire hazards	There are no long-term fire hazards listed in this zone in the Fire Hazard Removal Case Management System.				
Frequency of elevated fire danger	 On average, this zone experiences: Urban Areas [15] of days of extreme fire danger per fire season (Oct-May) [12.5] of days of very high fire danger per fire season (Oct- May) Rural Areas 				
	 [10] of days of extreme fire danger per fire season (Oct-May) [7.5] of days of very high fire danger per fire season (Oct- May 				

Fire	hist	orv

Year	Fire	Cause
2021	Korokipo Road fire threatened 6 homes and caused significant damage to the power supply network.	Suspicious
2020	Tangoio Forest fire (400 ha) commercial forest.	Caused by forest operations
2020	Brownrigg fire (90 ha) pasture and crop.	Caused by farm machinery
2020	Tikokino/SH50 fire (27 ha) pasture, commercial forest and bush, threatened 3 homes.	Farming operations (mowing)
2017	Ripia Fire (90 ha) kānuka/mānuka and beech forest took several weeks to extinguish	Campfire in the remote Ripia Valley
2017	Raukawa Road/ Colin White fire (165 ha) pasture.	Farming operations
2017	Waimārama Fire (168 ha) pasture and commercial forest destroyed 1 house.	Believed to have been caused by powerlines
2017	Raukawa Road fire (14.8 ha) destroyed a shed and damaged a house	Caused by trees in powerlines
2017	Dartmoor Road fire (8.6 ha) threatened 3 homes.	Caused by trees in powerlines
2006	Omarunui Landfill fire	Unknown

Unwanted vegetation wildfires do occur as a consequence of:

- Using fire as a land management tool
- Using fire for cooking, warmth, cultural or recreational purposes
- Powerlines in trees or broken lines
- Agricultural Machinery
- Power Tools, Chainsaws
- Pyrotechnics and fireworks

Predominant fuel type The predominant fuel type in this zone is a mixture of grassland, pastoral, cropping, horticulture, viticulture, and forestry. In the built environment, there are developments comprising residential and commercial properties. Industrial zones feature in most towns.

Thresholds

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

Grass Curing (GC%)	Build Up Index (BUI)		
(%)	≤39	40-59	≥60
0-50	Open	Open/Restricted	Restricted/Prohibited
50-70	Open/Restricted	Restricted	Prohibited
>70	Restricted/Prohibited	Prohibited	Prohibited

	Open	Open fire season		
	Open/Restricted	Open fire season but we may move earlier if forecast conditions support	to a restricted season rt this.	
	Restricted	Restricted fire season		
	Restricted/prohibited	Restricted Fire Season but we may move to a prohibited sea earlier if forecast conditions support this or stay in a prohibit season longer if grasses remain dry and cured.		
	Prohibited	Prohibited fire season		
Prohibition on fires in open air (section 52)	We can use the same in the open air under s but use section 52 wh enough to make chang Other local thresholds	can use the same Fire Weather System trigger thresholds for prohibiting fires he open air under section 52 as we do for changing to a prohibited fire season use section 52 when the fire risk conditions are not expected to last long ough to make changing to a prohibited fire season practical. her local thresholds have not been set.		
Prohibitions or restrictions on activities	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.			
(section 52)	Advice is available through the website <u>Checkitsalright.nz</u> for when to avoid certain activities that pose a risk for causing a wildfire. Noting these are voluntary restrictions it is envisaged the majority of public will follow this, where there is an elevated risk or public are not following this advice, imposing prohibitions or restrictions on activities is a tool available to us.			
	Further information on Voluntary restrictions on high-risk activities for the whole of Te Matau-a-Māui / Hawke's Bay is available in <u>Appendix One</u> of this document.			
Representative remote automated	The Remote Automate have reached the trigg	ed Weather Station (RAWS) used t ger thresholds are:	to determine whether we	
weather stations	Napier	Te Pōhue	Crownthorpe	
	Te Apiti	Whakatu	Te Haroto	
	Waihau	Tutira	Three Kings	
	Ngamatea	Ongaonga	Kaiwaka	
	Gwavas	Waipawa	Kererū	
	Bridge Pa			
	We will consider the for season.	precast for these locations when o	declaring or revoking a fire	

Interpreting this matrix:



Zone Map - Heretaunga/Ahuriri – Hastings/Napier

Mahia Peninsula and Wairoa Coast

Geography	This zone extends from Mahanga Beach on the northern side of the Mahia Peninsula isthmus, south to Tutira and east from SH2 to the coast, encompassing the localities of Tutira, part of Putorino, Mōhaka, Wairoa, parts of Whakaki and Nuhaka.				
Demographics	Refer to the area overview for demographics in this zone				
Climate/weather	The zones weather has quite a special climate zone, with the weather governed by the peninsula. The area is either wetter or drier than the rest of the Wairoa District. Unpleasant weather events have on occasion caused a number of days that these zones have been isolated from the rest of the district and or country.				
Land cover/ land use	The predominant land use in this z of the peninsula being established	one is pastoral f in commercial f	arming, with an orests.	increase in areas	
	There are some areas of forest cor coastal area.	nmercial east of	at of State Highway 2 and out to the		
	In the built environment, there are commercial properties. Industrial	e developments zones feature in	comprising resid most towns.	ential and	
Industry	Industry	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures	
	 Primary production, including horticulture and agriculture use of machinery – sparks use of fire for land management relevant operations affected 				
	 Forestry use of machinery – sparks relevant operations affected Use of firebreaks 				
	 Apiculture (beekeeping) Use of smoke Use of fire to destroy infested hives 				
	 Tourism and recreation Increase in Holiday destination population People unfamiliar with local fire risk and rules Access to locations may be restricted during high fire danger 				
	Rocket Lab Launch FacilityTactical Fire Plan in place				

Lifeline utility/ other	Contributes to	Affected by	Needs to be
infrastructure	increased risk of fire in high risk conditions	use of fire control measures	protected b using fire control measures
 Electricity transmission lines Sparking during high winds Use of auto-reclosers limited in high fire danger Recommended vegetation mitigation practices 			
 Railway line Sparks from passing trains and during track maintenance 			
 Roading network Sparks from vehicle malfunction. Spark causing activities during road maintenance and mowing 			
 Natural gas distribution network Gas leaks Protected by own controls on use of fire and other activities in vicinity 			
 Wairoa Aerodrome 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 			
 Telecommunications network Protect by applying controls to surrounding areas 			
Mahia village auxiliary generatorNot at imminent risk			

Recreational locations

Lifeline

utilities/other infrastructure

Cultural and recreational activities and events permanent residents to 1700 over the summer Holiday period.

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

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

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

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

Cultural and recreational activities and events	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using of fire control measures
 Marae in this zone Cultural fires Wāhi tapu and taonga 			
 Fireworks Use may be prohibited during high fire danger Pyrotechnics managed by other approvals Higher fire risk over Christmas New Year Period and late summer 			
TrampingCampfiresAccess may be restricted during high fire danger			
 Hunting and Fishing Hunters singeing pigs Use of off-road vehicles – hot exhausts in long grass Campfires Increase in people without knowledge of fire risk or rules 			
 Various Concerts, Music Festivals and Private Functions Peri-urban locations High Fire Danger Season Pyrotechnics managed by other process Public use of fireworks may be restricted during high fire danger 			
 Matariki Celebrations Traditional Fires Fireworks Generally, in low-risk season 			
Various Cultural EventsPeri-Urban locationsHigh Fire Danger Season			
Campfire and bonfires on the beaches			

Special risk area	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using of fire control measures
 Rocket Lab Launch Facility Significant international and national site Rocket Lab has a site fire response plan and a tactical fire response plan 			
 Mahia isthmus during holiday periods Increase in population Two roads in to and out of the isthmus 			
 Opoutama wilding pines Very volatile fuels High intensity fires Some housing within this area at risk 			
 Public conservation land Ecological values at risk In own zone to apply separate controls 			
 Extensive small block properties around urban centres. High summer fuel loads Lack of understanding of the use of fire as a land management tool Restrictions on activities Peri-urban assets 			
Events and concerts with bonfiresPeri-urban locationsHigh fire danger time of year			
Areas and population centres east of State Highway 2 can become isolated in adverse weather or natural disaster events			
 Heritage Buildings Generally wooden construction Difficult to protect Difficult to save if involved in fire Often in isolated locations 			
Wairoa Landfill and Recycling centre	\boxtimes	\boxtimes	\boxtimes

Special risk areas
	 Hot mat Lithium- in the la Use of n Relevan 	erial waste disposal lon batteries disposed ndfill nachinery -sparks t operations affected				
	 Close to develop 	peri-urban ments				
	Fire tactical plans are prepared for high-risk operations, businesses and areas as identified by the Hawkes Bay Wildfire Threat Analysis.					
Known fire hazards	There are no long-term fire hazards listed in this zone in the Fire Hazard Removal Case Management System.					
Frequency of elevated fire danger	 On average, this zone experiences: 4.1 of days of extreme fire danger per fire season (Oct-May) 5.1 of days of very high fire danger per fire season (Oct-May) 					
Fire history	The known activities re	fire history for this zone gulated by our fire cont	e for significant rol powers incl	wildfires or fires udes:	caused by	
	Year	Fire	Cause			
	2009	Mahia	Powerlines	in trees		
	Unwanted v	vegetation wildfires do	occur as a cons	equence of:		
	• Using fi	re as a land manageme	nt tool			
	Using fi	re for cooking, warmth	cultural or rec	reational purpos	es	
	• Powerli	nes in trees or broken l	ines			
	Agricult	ural Machinery				
	• Power 1	ools, Chainsaws				
	Pyrotec	hnics and fireworks				
Predominant fuel type	The predom	iinant fuel type in this z	one is a mixtur	e of grassland ar	nd forestry.	

Thresholds

Fire seasons

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

Grass Curing (GC%)	Build Up Index (BUI)		
(%)	≤39	40-59	≥60
0-50	Open	Open/Restricted	Restricted/Prohibited
50-70	Open/Restricted	Restricted	Prohibited
>70	Restricted/Prohibited	Prohibited	Prohibited

Interpreting this matrix:

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

In the Hawkes Bay fire environment, grasses are the main contributor to out of control fires on windy days, so a lower curing threshold is preferred. Fire Permitting mitigates the risk of fires in heavier fuel types providing for a higher BUI threshold.

Prohibition on fires in open air (section 52)	We can use the same Fire Weather System trigger thresholds for prohibiting fires in the open air under section 52 as we do for changing to a prohibited fire season but use section 52 when the fire risk conditions are not expected to last long enough to make changing to a prohibited fire season practical. Other local thresholds have not been set.				
Prohibitions or restrictions on activities (section 52)	Localised trigger thresholds for applying section 52 to activities have not yet been developed, however there are some local mitigations used to reduce the need to implement it.				
	Advice is available through the website <u>Checkitsalright.nz</u> for when to avoid certain activities that may pose a risk of causing a wildfire. Noting these are voluntary restrictions it is envisaged the majority of public will follow this, where there is an elevated risk or public are not following this advice, imposing prohibitions or restrictions on activities is a tool available to us.				
	Further information on Voluntary restrictions on high-risk activities for the whole of Te Matau-a-Māui / Hawke's Bay is available in <u>Appendix One</u> of this document.				

 Representative
remote automated
weather stations
 The Remote Automated Weather Station (RAWS) used to determine whether we
have reached the trigger thresholds are:

 Mahia Aws
 Wairoa
 Kaiwaka

 Tutira
 Kaiwaka

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



Zone Map Mahia Peninsula and Wairoa Coast

Tararua

Geography	This zone extends from the east coast to the main divide of the southern Ruahine and northern Tararua ranges. From the Takapau Plains in the north to Mt Bruce in the south.					
Demographics	Refer to the area overview for demographics in this zone					
Climate/weather	The zones weather is largely influenced by the Manawatu Gorge that provides westerly weather to spill over to the eastern side of the divide, strong westerly fohn winds and southerly weather systems that affect the coastal areas. The variability in rainfall in the spring to autumn seasons gives rise to mixed fire seasons across the Tararua, between periods of lush growth and moisture deficits that can lead to drought conditions. A dry spell in extreme cases can last for several months. During periods of general, strong west to northwest flow over the North Island, the winds across the district lowlands will be warm, dry foehn winds. In extreme cases temperatures may be 27-40°C with a relative humidity of 10–13 percent. Conversely, long periods of south-to-south easterly flows over the South Island bring cold wet conditions to coastal and inland areas. The district averages 1815 hours of sunshine annually. The average annual rainfall in the district is 973mm however, this increases closer to the Tararua and Ruahine Ranges.					
Land cover/ land use	The predominant land use in this z farming in the less drought prone There are some extensive areas of	zone is pastoral f areas. F commercial anc	arming with sign I carbon forestry	ificant dairy east of State		
	Highway 2 and out to the coastal a In the built environment, there are	area. e developments	comprising resid	ential and		
-	commercial properties. Industrial zones feature in most towns.					
Industry	Industry	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures		
	Primary production, including horticulture and agriculture					
	 use of machinery – sparks use of fire for land management 					

• relevant operations affected \boxtimes \boxtimes \boxtimes Forestry • use of machinery – sparks • relevant operations affected • Use of firebreaks Apiculture (beekeeping) \boxtimes \boxtimes • Use of smoke • Use of fire to destroy infested hives Meat Processing \boxtimes

\square	
\square	

Lifeline utilities/other infrastructure

Lifeline utility/ other infrastructure	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures
 Electricity transmission lines Sparking during high winds Use of auto-reclosers limited in high fire danger Recommended vegetation mitigation practices 			
Railway lineSparks from passing trains and during track maintenance			
 Roading network Sparks from vehicle malfunction Spark causing activities during road maintenance and mowing 			
 Natural gas distribution network Gas leaks Protected by own controls on use of fire and other activities in vicinity 			
 Dannevirke Aerodrome 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 		
Telecommunications networkProtect by applying controls to surrounding areas		
Te Apiti Wind Farm Protected by own controls on use of fire and other activities in vicinity		

Recreational locations

Pūkaha Mt Bruce National Wildlife Centre •

Whariti Peak

Manawatu Gorge Walk

Cultural and recreational activities and events

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

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

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

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

Cultural and recreational activities and events	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using of fire control measures
Six Marae in this zoneCultural cookingWāhi tapu and taonga			
 Fireworks Use may be prohibited during high fire danger Pyrotechnics managed by other approvals Higher fire risk over Christmas New Year Period and late summer 			
TrampingCampfiresAccess may be restricted during high fire danger			
Hunting and FishingHunters singeing pigs			

_	 Use of off-road vehicles – hot exhausts in long grass Campfires Increase in people without knowledge of fire risk or rules 			
	 Various Concerts, Music Festivals and Private Functions Peri-urban locations High Fire Danger Season Pyrotechnics managed by other process Public use of fireworks may be restricted during high fire danger 			
	 Matariki Celebrations Traditional Fires Fireworks Generally, in low-risk season 			
	Various Cultural EventsPeri-Urban locationsHigh Fire Danger Season			
	Campfire and bonfires on the beaches			
Special risk areas	Special risk area	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using of fire control measures
Special risk areas	Special risk area Public conservation land Ecological values at risk In own zone to apply separate controls	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using of fire control measures
Special risk areas	Special risk area Public conservation land Ecological values at risk In own zone to apply separate controls Extensive small block properties around urban centres. High summer fuel loads Lack of understanding of the use of fire as a land management tool Restrictions on activities Peri-urban assets	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using of fire control measures
Special risk areas	Special risk area Public conservation land Ecological values at risk In own zone to apply separate controls Extensive small block properties around urban centres. High summer fuel loads Lack of understanding of the use of fire as a land management tool Restrictions on activities Peri-urban assets Events and concerts with bonfires Peri-urban locations High fire danger time of year	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using of fire control measures

	 Heritage Bu General constru Difficult Difficult fire Often in Fire tactical identified b	ildings ly wooden ction to protect to save if involved in isolated locations plans are prepared for y the Hawkes Bay Wild	□ high-risk operat fire Threat Analy	Cions, businesses	and areas as		
Known fire hazards	There are n Case Mana	o long-term fire hazard gement System.	s listed in this zc	one in the Fire Ha	azard Removal		
Frequency of elevated fire danger	 On average, this zone experiences: 5 of days of extreme fire danger per fire season (Oct-May) 3.5 of days of very high fire danger per fire season (Oct- May) When compared with Hawkes Bay and the Wairarapa, the Tararua zone has a lower fire danger severity, and it is unusual for the fire climate to impact other activities, apart from the normal controls and constraints on the use of fire which are applied through a restricted or prohibited fire season. 						
Fire history	The known fire history for this zone for significant wildfires or fires caused activities regulated by our fire control powers includes:						
	2012	Waitawhiti Road	Reignition o	f old burn off due	to high winds		
	 Unwanted vegetation wildfires do occur as a consequence of: Using fire as a land management tool Using fire for cooking, warmth, cultural or recreational purposes Powerlines in trees or broken lines Agricultural Machinery Power Tools, Chainsaws Pyrotechnics and fireworks 						
Predominant fuel type	The predom	ninant fuel type in this a	one is a mixture	e of grassland an	d forestry.		

Thresholds

Fire seasons

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

Grass Curing (GC%)	Build Up Index (BUI)		
(%)	≤39	40	≥6 <mark>0</mark>
0-50	Open	Open/Restricted	Restricted/Prohibited
50-70	Open/Restricted	Restricted	Prohibited
>70	Restricted/Prohibited	Prohibited	Prohibited

Interpreting this matrix:

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

In the Hawkes Bay fire environment, grasses are the main contributor to out of control fires on windy days, so a lower curing threshold is preferred. Fire Permitting mitigates the risk of fires in heavier fuel types providing for a higher BUI threshold.

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	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.
(section 52)	Advice is available through the website <u>Checkitsalright.nz</u> for when to avoid certain activities that may be of risk for causing a wildfire. Noting these are voluntary restrictions it is envisaged the majority of public will follow this, where there is an elevated risk or public are not following this advice, imposing prohibitions or restrictions on activities is a tool available to us.
	Further information on Voluntary restrictions on high-risk activities for the whole of Te Matau-a-Māui / Hawke's Bay is available in <u>Appendix One</u> of this document.

 Representative remote automated weather Automated Weather Station (RAWS) used to determine whether we have reached the trigger thresholds are:

 weather stations
 Alfredton South
 Pahiatua
 Waione East

 Ākitio
 Gwavas
 Dannevirke

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

Zone Map - Tararua



Geography	This zone extends from the eastern side of State Highway 2 to the main divide and Te Urewera, and from the Wharerata to the Mohka River and the locality of Tutira. It includes hill country, areas of steep limestone escarpments and clays with Taupo pumice topsoil.			
Demographics	Refer to the <u>area overview</u> for der	nographics in thi	s zone	
Climate/weather	The climate in this zone varies from summer months, to rainforest in t The zone is not usually impacted k Unpleasant weather events have of zones have been isolated from the	m inland coastal he back country by east coast dro on occasion caus e rest of the distr	country that ofte and Te Urewera ughts and has re ed a number of e ict and or count	en dries in gular rainfall. days that these ry.
Land cover/ land use	The predominant land cover in thi forestry along the northern sectio	s zone is pastora n of the zone and	l farming with la d Patunamu Fore	rge areas of est.
	There are some large areas of farm majority of these areas use fire as	nland reverting t a land managem	o manuka, kanul ient tool.	ka and gorse. A
	Land use is beef, sheep and deer f carbon forestry.	arming. With mu	Iltiple areas of co	ommercial and
	In the built environment, there are commercial properties. Industrial	e developments zones feature in	comprising resid most towns.	ential and
Industry	Industry	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures
	 Primary production, including horticulture and agriculture use of machinery – sparks use of fire for land management relevant operations affected 			
	 Forestry use of machinery – sparks relevant operations affected Use of firebreaks 			
	 Apiculture (beekeeping) Use of smoke Use of fire to destroy infested hives 			
	 Tourism and recreation People unfamiliar with local fire risk and rules Access to locations may be restricted 			

Power Generation Facilities at Tuai and Waihi	\boxtimes	\boxtimes	
Transmission lines			
 Sparking during high wind events 			
 Use of Auto reclosures limited in high fire danger 			
 Recommended vegetation mitigation practices 			

Lifeline
utilities/other
infrastructure

Lifeline utility/ other infrastructure	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures
 Electricity transmission lines Sparking during high winds Use of auto-reclosers limited in high fire danger Recommended vegetation mitigation practices 			
Railway lineSparks from passing trains and during track maintenance			
 Roading network Sparks from vehicle malfunction. Spark causing activities during road maintenance and mowing 			
 Natural gas distribution network Gas leaks Protected by own controls on use of fire and other activities in vicinity 			
 Telecommunications network Protect by applying controls to surrounding areas 			

National grid and local supply transmission lines cross through or alongside many forest blocks. Main transmission lines feed the national grid from the power stations at Tuai and Waihi.

State Highway 2 and Waikaremoana roads are prone to closure from weather related events which has made the communities quite resilient and road closures can prevent Brigades from responding to emergencies.

Te Urewera and Great Walk around Lake Waikaremoana

Recreational locations

Cultural and recreational activities and events

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

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

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

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

Cultural and recreational activities and events	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using of fire control measures
19 Marae in this zone	\boxtimes	\boxtimes	
Cultural cooking, e.g. hāngīWāhi tapu and taonga			
Fireworks	\square	\square	
 Use may be prohibited during high fire danger 			
 Pyrotechnics managed by other approvals 			
 Higher fire risk over Christmas New Year Period and late summer 			
Tramping	\boxtimes	\boxtimes	
Campfires			
 Access may be restricted during high fire danger 			
Hunting and Fishing	\boxtimes	\boxtimes	
Hunters singeing pigs			
 Use of off-road vehicles – hot exhausts in long grass 			
Campfires			
Increase in people without knowledge of fire risk or rules			
Various Concerts, Music Festivals and Private Functions	\boxtimes	\boxtimes	
Peri-urban locations			
High Fire Danger Season			
 Pyrotechnics managed by other process 			
 Public use of fireworks may be restricted during high fire danger 			
Matariki Celebrations	\square	\square	

_	Traditional Fires			
	• Fireworks			
	• Generally, in low-risk season			
	Various Cultural Events	\boxtimes	\boxtimes	
	Peri-Urban locations			
	High Fire Danger Season			
	Campfire and bonfires on the beaches			
Special risk areas	Special risk area	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using of fire control measures
	Public conservation land			\boxtimes
	Ecological values at risk			
	 In own zone to apply separate controls 			
	Extensive small block properties around urban centres.	\boxtimes	\boxtimes	\boxtimes
	High summer fuel loads			
	 Lack of understanding of the use of fire as a land management tool 			
	Restrictions on activities			
	Peri-urban assets			
	Te Urewera	\boxtimes	\boxtimes	\boxtimes
	Restriction on recreational users			
	Area is wāhi tapu and taonga			
	Events and concerts with bonfires	\boxtimes	\boxtimes	
	Peri-urban locations			
	• High fire danger time of year			
	Areas and population centres east of State Highway 2 can become isolated in adverse weather or natural disaster events			
	Heritage BuildingsGenerally wooden			
	 Difficult to protect Difficult to save if involved in fire 			
	Often in isolated locations			
	Extensive small block properties around urban centres.			
	High summer fuel loads			

			1			
	Lack of use of manag	understanding of the fire as a land ement tool				
	Restric	tions on activities				
	Peri-ur	ban assets				
	Fire tactical identified b	plans are prepared for y the Hawkes Bay Wild	r high-ris lfire Thre	k operat eat Analy	cions, businesses vsis.	s and areas as
Known fire hazards	There are no long-term fire hazards listed in this zone in the Fire Hazard Removal Case Management System.					
Frequency of	On average, this zone experiences:					
elevated fire	• 9 of day	vs of extreme fire dang	er per fir	e seaso	n (Oct-Mav)	
danger	• 62 of d	avs of very high fire da	inger ner	fire sea	son (Oct- May)	
	The major impact of elevated fire danger is the restriction on the use of fire as a land management tool during these periods.					
et a lata a c						
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	Сац	use		
	Fire is used extensively as a land management tool with advice on safe and effective burning provided by Fire and Emergency New Zealand.					
	The zone has several out of control fires each summer caused by unpermitted burning, though these have not developed into large fires.					
	Unwanted vegetation wildfires do occur as a consequence of:					
	Using fire as a land management tool					
	 Using fire for cooking, warmth, cultural or recreational purposes 					
	Powerlines in trees or broken lines					
	Agricultural Machinery					
	Power Tools, Chainsaws					
	Pyrotechnics and fireworks					
Predominant fuel type	The predon	ninant fuel type in this	zone is a	mixture	e of grassland ar	d forestry.

Thresholds

Fire seasons

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

Grass Curing (GC%)	Build Up Index (BUI)		
(%)	≤39	40-59	≥60
0-50	Open	Open/Restricted	Restricted/Prohibited
50-70	Open/Restricted	Restricted	Prohibited
>70	Restricted/Prohibited	Prohibited	Prohibited

Interpreting this matrix:

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

In the Hawkes Bay fire environment, grasses are the main contributor to out of control fires on windy days, so a lower curing threshold is preferred. Fire Permitting mitigates the risk of fires in heavier fuel types providing for a higher BUI threshold.

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
activitiesLocalised 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.(section 52)Advice is available through the website Checkitsalright.nz for when to avoid certain

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

Further information on Voluntary restrictions on high-risk activities for the whole of Te Matau-a-Māui / Hawke's Bay is available in <u>Appendix One</u> of this document.

Representative weather stations

The Remote Automated Weather Station (RAWS) used to determine whether we **remote automated** have reached the trigger thresholds are:

Te Haroto	Ruatahuna B	Wharekōpae B
Tutira	Kaiwaka	Wairoa Aws
Cricklewood	Tuwharetoi	Wharerata

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

Zone Map - Wairoa rural



Public conservation land

Geography	Public Conservation Land or other land managed by Department of Conservation (DOC) is classified as a separate zone. Public Conservation Land is predominantly located within Whirinaki Te Pua-a-Tāne Conservation Park, the Kaweka, Wakarara, Ruahine and Tararua Ranges. Smaller areas are also identified through other zones within the fire plan area. These areas are managed by DOC and (based on current practice) will remain in a restricted season even when the rest of the zones go to an open fire season but will join the surrounding zone when it goes to a prohibited fire season						
Climate/weather	Predominantly northwest winds	between Octol	ber to late Febr	uary.			
	Wind conditions around the Kur and may cause issues with aeria	ipapango area a I firefighting teo	are sometime u chniques.	npredictable			
	The Kaweka, Ruahine and Tarard weather condition from low leve summer.	ua Ranges recei el snow through	ve a range of se n to drought cor	easonal nditions in the			
Land cover	The vegetation of Whirinaki cha basins through to beech forest i	nges from lowla n higher altitud	and podocarp fo e areas.	prest in the			
	The Kaweka, Ruahine and Tarard valleys and beech forests.	ua ranges conta	in alpine shrub	lands, tussock			
	The Kaweka Forest Park has larg eastern region of the park.	e tracts of wild	ing pines, mainl	y in the south-			
	The smaller areas throughout th indigenous vegetation (native for	ne rest of the dis prest).	strict are predo	minantly			
Special risk areas	Special risk area	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using of fire control measures			
	Maungaharuru Mainland Island High value biodiversity site 						
	 Mangatutu Hot Springs Popular camping rea Only one access road through approximately seven kilometres of scrub land Known site for illegal camping 						
	 Kuripapango Campsite Popular camping area on the side of the Napier- Taihape Road 						

 Next to a Pan Pac plantation to the east and Māori land to the west Known site for illegal camping 		
Tussock ValleySignificant valley with a vast tract of Red Tussock		
 Approximately 270 hectares in the extreme western region of the park, bordering the Ngaruroro River and Kaimanawa Forest Park 		

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

Fire history

The known fire history in public conservation lands zone includes:

Year	Fire	Cause
2017	Ripia (90ha)	Undetermined
1980s	Gold Creek (several hundred ha)	Undetermined

Thresholds

round

Restricted 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 seasons year surrounding zone goes to an open fire season, public conservation land will remain in a restricted fire season.

Thresholds for declaring or revoking a prohibited fire season are the same as the thresholds for the surrounding zone.

Мар



NZ Defence Force

Scheduled Defence Areas

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

Within the Hawkes Bay local area, activities in the following Defence Areas are subject to New Zealand Defence Force fire control powers, including fire permit requirements:

• Makomako – part of Linton Military Camp

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

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

Forestry Commercial and carbon farming forestry is an expanding land use throughout Geography the Hawke's Bay area. This includes small woodlots and extensive commercial plantations; these are generally located in the rolling and steeper country. Many of these are isolated with difficult access especially for standard fire appliances. Forestry is spread throughout the Hawke's Bay therefore the climate for **Climate/weather** Forestry encompasses all the rural areas from the Wharerata to Eketāhuna. Land cover/ This zone is a commercial forest zone predominantly consisting of mixed age land use and multi-rotational radiata pine. This makes for complex fire management in the areas of reduction, mitigation, and response. Industry Contributes Needs to be Affected by Industry to increased use of fire protected by risk of fire in control using fire control high risk measures conditions measures Primary production, including \boxtimes \times \boxtimes horticulture and agriculture use of machinery – sparks • use of fire for land management • relevant operations affected \boxtimes \boxtimes \boxtimes Forestry • use of machinery – sparks relevant operations affected • Use of firebreaks Spark hazardous operations \boxtimes \times \times such as roadside mowing, harvesting, well drilling **Relevant operations** affected

Commercial forestry contributes about \$1 billion and 2400 jobs to the Hawke's Bay area.

Significant loss of forest estate due to fire has a flow on impact on the whole Hawke's Bay economy with several sawmills, supporting businesses, infrastructure and the Napier Port impacted by adverse events such as fire.

_							
Lifeline utilities/other infrastructure	Lifeline utility/ other infrastructure	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures			
	 Electricity transmission lines Sparking during high winds Use of auto-reclosers limited in high fire danger Recommended vegetation mitigation practices 						
	 Railway line Sparks from passing trains and during track maintenance 						
	 Roading network Sparks from vehicle malfunction, discarded cigarettes Spark service estivities 						
	Spark causing activities during road maintenance and mowing						
Recreational locations	Forest areas are extensively used for recreational activities that will be affected by Fire and Emergency exercising fire control powers.						
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. Several forest blocks are either under Māori ownership, in partnership with Māori or subject to Te Tiriti o Waitangi claim processes. The owners should be consulted with when considering exercising our fire control powers to						
	restrict access to lands or restrict activities and use. 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 core are listed as stable but we						
	Large scale events that might be cancelled because a restriction on activities can have a significant economic impact.						
	Placing restrictions or prohibitio impose any unreasonable restric recreational activities in this zor	ns on fire hazar ctions on people ie.	dous activities e living and enjo	should not oying			
	Cultural and recreational activities and events	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using of fire control measures			
	34 Marae in this zone	\boxtimes	\boxtimes				

Wāhi Tapu and Taonga Cultural cooking. I.e. hāngī		
 Fireworks Use may be prohibited during high fire danger Pyrotechnics managed by other approvals Higher fire risk over Christmas – New Year Period and late summer 		
TrampingCampfiresAccess may be restricted during high fire danger		
 Hunting and Fishing Hunters singeing pigs Use of off-road vehicles – hot exhausts in long grass Campfires Increase in people without knowledge of fire risk or rules 		
 Various Concerts, Music Festivals and Private Functions Peri-urban locations High Fire Danger Season Pyrotechnics managed by other process Public use of fireworks may be restricted during high fire danger 		
Mountain Biking		
 Motorsport Spark Hazardous activity Affected by restrictions on activities 		
Various Cultural EventsPeri-Urban locationsHigh Fire Danger Season		
Campfire and bonfires on the beaches	\boxtimes	

– Special risk areas	Special risk	area	Contributes to increased risk of fire in high risk conditions	Affec use o contr meas	ted by f fire ol ures	Needs to be protected by using of fire control measures	
	 Public cons Ecologie In own separat 	ervation land cal values at risk zone to apply e controls					
	 Extensive small block properties around urban centres. High summer fuel loads Lack of understanding of the use of fire as a land management tool Restrictions on activities Peri-urban assets 						
	Events and bonfires • Peri-urk • High fire	s and concerts with es ri-urban locations gh fire danger time of year					
	Areas where forestry is located can become isolated in adverse weather or natural disaster events						
_	Fire tactical plans are prepared for high-risk operations, businesses and a as identified by the Hawkes Bay Wildfire Threat Analysis.						
Known fire hazards	There are no long-term fire hazards listed in this zone in the Fire Hazard Removal Case Management System.						
Frequency of elevated fire danger	 On average, this zone experiences: 9 days of extreme fire danger per fire season (Oct-May) 8 days of very high fire danger per fire season (Oct- May) The impact of stopping harvesting operations due to elevated fire risk is considerable immediately affecting forestry crews, transport, sawmills, Napier Port exports and customers. Most forestry companies manage and mitigate their own fire risk. Some companies use the NZ Forest Owners Forest Fire Risk Management Cuidelings to help manage risk.						
Fire history	The known activities re	fire history for this zongulated by our fire co	one for signi ontrol powe	ficant wil rs include	dfires or f	fires caused by	
	Year	Fire		Cause			
	2020 Tangoio Fire Harvesting Operations				ons		

	2020	Tikoki pastu bush.	no/Sh50 Fire (27 re, commercial fo Threatened 3 ho	ha) prest, and mes	Farming Operations (Mowing)	
	2017	Ripia I kānuk forest exting Awah	Fire (90 ha) a/mānuka and b took several we uish. Threatenec ohonu Forest	eech eks to I	Campfire in the remote Ripia Valley	
	2017	Waim pastu destro	ārama Fire (168 re and commerci oyed 1 house	na) al forest	Caused by trees in powerlines	
	2005	Moha	ka Forest Fire (20)4ha)		
	1996	Moha	ka Forest Fire (24	l1ha)		
	1973	Moha	ka Forest Fire (36	58ha)		
	Unwanted vegetation wildfires do occur as a consequence of:					
	 Using fire as a land management tool 					
	 Using fire for cooking, warmth, cultural or recreational purposes 					
	Powerlines in trees or broken lines					
	Agricultural Machinery					
	• Power	Tools,	Chainsaws			
	Pyrote	chnics	and fireworks			
Predominant fuel type	The predor grassland.	The predominant fuel type in this zone is Forestry with a mixture of grassland.				
hresholds						
Fire seasons	Build-up lı monitor w	ndex (E /here fo	BUI) is the most prestry is the pr	relevant o edominan	f the fire weather indices to t fuel type.	
	Build Up I	ndex (B	UI)			
	≤20		≥21	≥80		
	Open		Restricted	Prohibited		
	Interpreti	ng this	matrix:			
	Open		Open fire seaso	n		
	Restricted	d Restricted fire season				
	Prohibited Prohibited fire season					

Due to the status of many forests in the area either being harvested or recently harvested, forest fuel complex is more available to burn with a lower BUI.

Measures adopted by most forest owners in Hawke's Bay mitigates the risk of fires becoming large, so a higher BUI can be used for prohibitions.

For forestry operations

Hawkes Bay Forestry have developed a Hawkes Bay Forest Fire Risk Management Code level for use within their Hawkes Bay Forests.

Forestry hot works are also voluntary restricted with the thresholds being located within the forest fire management guidelines. Local forest management companies have traditionally taken a tougher approach than the recommendations. The inclusion of the Hawkes Bay Forest Fire Risk Management Code in the Hawkes Bay Fire Plan recognises these more risk adverse internal measures that are applied.

	Hawkes Bay Forestry Danger Code FWI ≥29				
	Forest Fire Risk Management Code level	BUI range	Mitigation Measures		
	Green	0 - 59	No controls (basic fire	efighting tools)	
	Blue	60 - 80	Increase Maintenance Procedures	e Checks & Notification	
	Yellow	81 - 100	Introduce Emergency Maintenance / Check	Plans & Increase	
	Orange	101 - 140	Introduce Work Restr Operations	rictions on Forest	
	Red	141 +	Introduce Work Restr Contingency Plans	ictions & Fire Response	
	There are five Fire Risk Management Code levels, based on the Build-Up Index (BUI) as the primary trigger for mitigation measures.				
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	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.				
(section 52)	Advice is available through the website <u>Checkitsalright.nz</u> for when to avoid certain activities that may be of risk for causing a wildfire. Noting these are voluntary restrictions it is envisaged the majority of public will follow this, where there is an elevated risk or public are not following this advice, imposing prohibitions or restrictions on activities is a tool available to us.				
Representative remote	The Remote Automated Weather Station (RAWS) used to determine whether we have reached the trigger thresholds are:				
weather stations	Cricklewood	Kaiwaka		Te Haroto	
	Te Pōhue	Gwavas		Napier	
	Kererū				

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

Zone Map



Appendix One

Voluntary restrictions on high-risk activities

During high fire danger periods the Hawkes Bay experiences many fires that are started by high-risk activities, with around 80% occurring during the hottest and driest time of the day, (after 2pm).

High risk activities include but are not limited to, wielding, grinding in the open, mowing/slashing, fireworks and any other activity that could cause a spark or hot exhaust discharge. In this plan it is recommended that the following levels are followed. These levels can be found and followed daily through the NIWA fire weather website <u>www.fireweather.niwa.co.nz</u> will be updated to display the Hawkes Bay District. The information is updated regularly throughout the day.

Definitions

Activity: Anything a person does that could generate heat or sparks that could cause an unwanted fire.

Outdoor hot works: Any outdoor activity using equipment/machinery that uses heat or flame or creates sparks during normal use, that could start an unwanted fire (for example, welding, grinding, cutting metal).

For forestry operations

The NZ Forest Owners Association have developed the Forest fire risk management guidelines (NZFOA 2018), which contain trigger point tables and recommend fire prevention actions during different fire danger levels for forestry. Fire and Emergency support these guidelines.

Forestry hot works are also voluntary restricted with the thresholds being located within the forest fire management guidelines. Local forest management companies have traditionally taken a tougher approach than the recommendations.

There are six Fire Risk Management Code levels, based on the Build-Up Index (BUI) as the primary trigger, with escalation if the Fire Weather Index (FWI) value exceeds 25

National default trigger set for forestry:

Forest Fire Risk Management Code level	BUI range	Fire Weather Index (FWI) code calibration of BUI range
Green	≤ 40	If FWI > 25 – elevate to Code Blue
Blue	40.1–60	If FWI > 25 – elevate to Code Yellow
Yellow	60.1–80	If FWI > 25 – elevate to Code Orange
Orange	80.1–100	If FWI > 25 – elevate to Code Red
Red	100.1–120	If FWI > 25 – elevate to Code Purple
Purple	> 120	

Noting these are voluntary restrictions it is envisaged the majority of public will follow this, where there is an elevated risk or public are not following this advice, imposing prohibitions or restrictions on activities is a tool available to us.

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

For outdoor hot works or agricultural, horticultural, lifestyle blocks and roadside maintenance operations.

This code level system has four levels. Since hot-works operations use heat or flame or create sparks that could start an unwanted fire, and agricultural, horticultural, lifestyle block and roadside maintenance works (especially mowing) are generally conducted in predominantly light fine fuels, the triggers are based on the fire weather indices for ease of ignition.

These triggers can be used for any activities undertaken in light fine fuels:

Grass-curing (percentage): Grass-curing is a primary factor. Generally, ignitions are unlikely at curing levels less than 50 percent, a moderate risk at values 50–85 percent and high risk at curing over 85 percent.

Fine fuel moisture code (FFMC): Wind, temperature, relative humidity, and rainfall are also key influences on the moisture content of fine fuels and the probability of an ignition in grasses, so FFMC is included.

FFMC	EMC Grass curing percentage					
(hourly)	< 50 percent	50–85 percent	> 85 percent			
< 76	Code Green Low risk of ignition	Code Green Low risk of ignition	Code Green Low risk of ignition			
76.1 – 83.4	Code Green Low risk of ignition	Code Green Low risk of ignition	Code Yellow			
83.5 - 87.4	Code Green Low risk of ignition	Code Yellow	Code Orange			
87.5 – 91.4	Code Yellow	Code Yellow	Code Orange			
91.5 – 95.4	Code Yellow	Code Orange	Code Red			
> 95.5	Code Orange	Code Red	Code Red			

Low fire danger, activities as normal.

High fire danger, carry means to extinguish a small fire and cease high-risk activities at 2pm.

Very high fire danger, restricted operations/hours of work, no high-risk activities.

Extreme fire danger, no high-risk activities/ cease activities.

Means to Extinguish a small fire may include but are not limited to water, hose and pump, scotty packs/manual water sprayer, hand tools such as shovels or fire extinguishers.

National default trigger for powerline operations

Some 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 which could create an ignition.

Some power distribution companies use a two-stage code level system to restrict the use of auto-reclosers. This helps to minimise the risk of starting a fire starting by switching the power back on after a fault.

Because most powerline fires start in grass or other fine fuels, grass curing and FFMC are used for the triggers. Windy conditions are likely to contribute to line faults (e.g. via line breaks from branches or fallen trees) so wind speed is also factored in.

Refer to Auto Reclosure Voluntary Restriction tables overleaf.

	Table 1: Average wind speed less than 40km/h						
	Curing percentage						
FFMC (hourly)	< 50 percent	50–85 percent	> 85 percent				
< 76	Level 1 – no controls	Level 1 – no d	controls	Level 1 – no controls			
76–83	Level 1 – no controls	Level 1 – no d	controls	Level 1 – no controls			
84–87	Level 1 – no controls	1 – no controls Level 1 – no controls		Level 1 – no controls			
88–91	Level 1 – no controls	Level 1 – no d	controls	Level 1 – no controls			
92–95	Level 1 – no controls	evel 1 – no controls Level 1 – no controls		Level 2:			
				Agree on risk mitigation actions.			
				 Avoid using auto-reclosers. 			
> 96	Level 1 – no controls	Level 2:		Level 2:			
		Agree on	risk mitigation actions.	Agree on risk mitigation actions.			
		Avoid usi	ng auto-reclosers.	Avoid using auto-reclosers.			

	Table 2: Average wind speed above 40km/h		
FFMC (hourly)	Curing percentage		
	< 50 percent	50–85 percent	> 85 percent
< 76	Level 1– no controls	Level 1 – no controls	Level 1 – no controls
76–83	Level 1– no controls	Level 1– no controls	Level 2: • Agree on risk mitigation actions. • Avoid using auto-reclosers.
84–87	Level 1– no controls	Level 2:Agree on risk mitigation actions.Avoid using auto-reclosers.	Level 2: • Agree on risk mitigation actions. • Avoid using auto-reclosers.
88–91	Level 2:Agree on risk mitigation actions.Avoid using auto-reclosers.	Level 2Agree on risk mitigation actions.Avoid using auto-reclosers.	Level 2:Agree on risk mitigation actions.Avoid using auto-reclosers.
92–95	Level 2:Agree on risk mitigation actions.Avoid using auto-reclosers.	Level 2:Agree on risk mitigation actions.Avoid using auto-reclosers.	Level 2:Agree on risk mitigation actions.Avoid using auto-reclosers.
> 96	Level 2:Agree on risk mitigation actions.Avoid using auto-reclosers.	Level 2: • Agree on risk mitigation actions • avoid using auto-reclosers	Level 2: • Agree on risk mitigation actions • avoid using auto-reclosers