

Fire Plan for  
**Tāmaki Makaurau (Auckland)**  
**Te Hiku**  
2021 –2024



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**Status of this document**

This document is issued by Fire and Emergency New Zealand.

**Recommendations for change**

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

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

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## Table of contents

<b>Introduction</b> .....	<b>1</b>
How to use this document .....	1
Why do we have fire plans? .....	1
Content of the fire plans .....	1
Local area and zones .....	2
Local area .....	2
Zones .....	2
Consultation .....	2
Key stakeholders .....	2
Review and amendment.....	3
<b>4 Rs of emergency management</b> .....	<b>4</b>
Reduction .....	4
Readiness.....	5
Response .....	5
Recovery.....	5
<b>Our commitment to working with Māori as tangata whenua</b> .....	<b>6</b>
<b>National Framework for Fire Control</b> .....	<b>6</b>
Our policies.....	6
Fire risk conditions .....	8
<b>Fire seasons</b> .....	<b>9</b>
Open fire seasons.....	10
Restricted fire seasons .....	10
Prohibited fire seasons.....	10
Trigger thresholds for changing fire seasons .....	10
<b>Prohibiting fires in open air (section 52)</b> .....	<b>11</b>
Trigger thresholds for prohibiting fire in open air.....	11
<b>Restricting and prohibiting activities (section 52)</b> .....	<b>12</b>
Trigger thresholds for restricting or prohibiting activities under section 52 .....	13
Activities and risk mitigation .....	13
Forestry operations .....	13
Powerline auto-reclosers .....	13
Hot works .....	13
Fireworks.....	14
<b>Communicating changes in fire seasons and restrictions or prohibitions</b> .....	<b>14</b>
<b>Fire permits</b> .....	<b>15</b>
Council bylaws, regional plans, legal covenants or restrictions.....	15
When a permit is needed .....	15
Fire types.....	15
Authorised fire types, descriptions and conditions in a restricted fire season.....	16
Authorised fire types on public conservation land in a restricted fire season.....	18
Authorised fire types, descriptions and conditions in a prohibited fire season .....	19
Authorised fire types on public conservation land in a prohibited fire season .....	20

Permits in prohibited fire seasons or during prohibitions under section 52 .....	20
Applying for a permit.....	20
Assessment.....	20
Mandatory conditions .....	21
<b>Firebreaks .....</b>	<b>22</b>
<b>Fire hazard removal.....</b>	<b>22</b>
Reporting fire hazards .....	22
Assessment of fire hazards.....	22
Initial review .....	23
Risk assessment matrix .....	23
Outcomes from the fire hazard assessment .....	24
Powers of entry .....	24
Fire hazard removal notice (section 65).....	24
Imminent danger notice (section 68).....	25
<b>Regulatory compliance .....</b>	<b>25</b>
Fire and Emergency’s role .....	25
<b>Contact Fire and Emergency.....</b>	<b>26</b>
General enquiries and questions.....	26
Lodge a complaint .....	26
Fire hazards .....	26
Local contacts for this plan.....	26
<b>Glossary .....</b>	<b>27</b>
<b>Tāmaki Makaurau (Auckland) information .....</b>	<b>29</b>
<b>Area overview.....</b>	<b>30</b>
Deprivation Index .....	33
Council bylaws, regional plans, legal covenants or restrictions.....	36
Local contacts .....	37
Schedule of stakeholders .....	38
National-level stakeholders.....	38
Area-level stakeholders.....	40
<b>Zone information.....</b>	<b>44</b>
Rural zone.....	44
Thresholds .....	54
Rural zone map.....	56
Rural zone stakeholders .....	57
Mainland Urban zone .....	61
Thresholds .....	69
Mainland Urban zone map.....	71
Mainland urban zone stakeholders.....	72
Island zones .....	74
Thresholds .....	80
Islands zone map .....	81
Island zones stakeholders .....	82
<b>Appendix 1 - Reticulated water coverage .....</b>	<b>84</b>

**Document information**

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**Approval**

Full Name: Ron Devlin

Title: Region Manager, Te Hiku

Date: 27 July 2021

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Signature



## Introduction

### How to use this document

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

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

### Why do we have fire plans?

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

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

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

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

### Content of the fire plans

Fire plans must:

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

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

A fire plan must be consistent with:

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

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

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

## Local area and zones

### Local area

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

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

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

### Zones

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

## Consultation

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

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

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

### Key stakeholders

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



## **Review and amendment**

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

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

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

## 4 Rs of emergency management

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

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

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



### Reduction

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

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

For Fire and Emergency, this work includes:

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

## Readiness

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

For Fire and Emergency, this includes:

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

## Response

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

For Fire and Emergency, this includes:

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

It can also include responding to:

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

## Recovery

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

For Fire and Emergency, this includes:

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

## Our commitment to working with Māori as tangata whenua

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

We recognise:

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

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

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

## National Framework for Fire Control

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

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

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

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

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

## Our policies

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

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

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

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

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

## Fire risk conditions

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

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

We also take these into account when setting fire seasons.

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

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

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

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

## Fire seasons

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

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

Fire seasons are applied to geographic zones based on:

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

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

### Open fire season



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

### Restricted fire season



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

### Prohibited fire season



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

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

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

## Open fire seasons

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

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

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

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

## Restricted fire seasons

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

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

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

## Prohibited fire seasons

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

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

## Trigger thresholds for changing fire seasons

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

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

The trigger thresholds make use of:

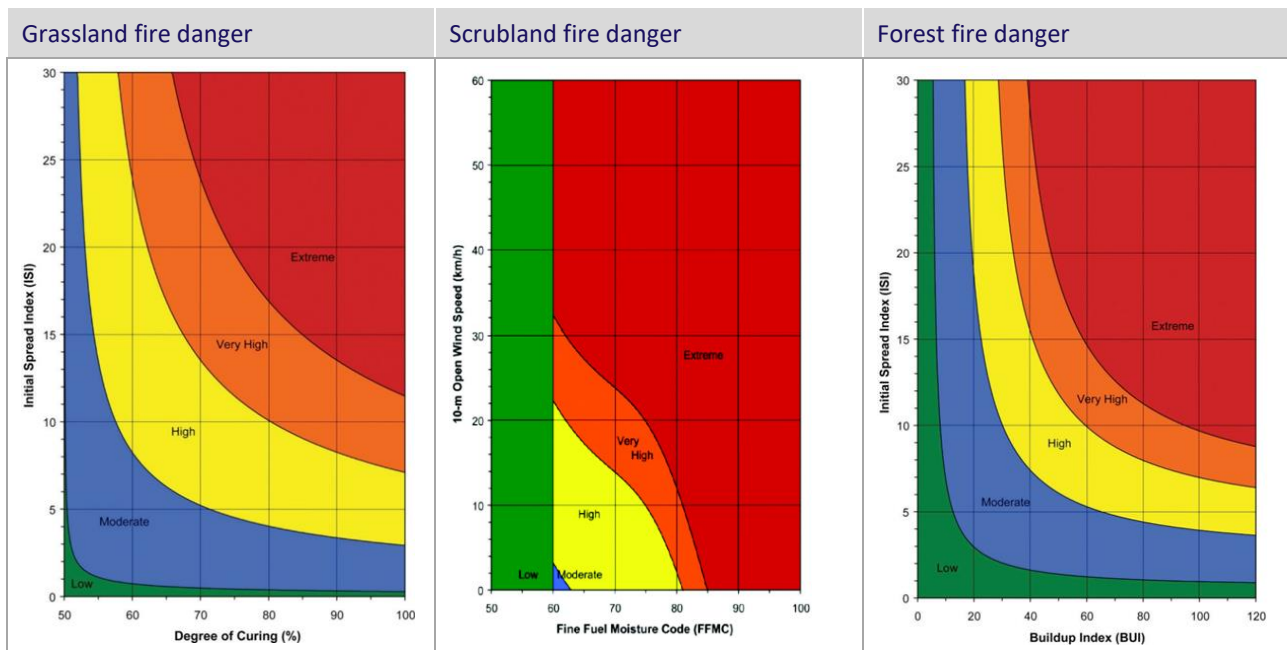
- the Remote Automatic Weather Station (RAWS) climatology data for the fire plan area or zone.
- historical fire data for the fire plan area or zone.

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

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

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





## Prohibiting fires in open air (section 52)

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

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

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

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

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

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

## Trigger thresholds for prohibiting fire in open air

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

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

## Restricting and prohibiting activities (section 52)

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

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

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

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

Prohibition or restriction means:

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

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

Essential services are:

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

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

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

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

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

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

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

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

## Activities and risk mitigation

### Forestry operations

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

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

### Powerline auto-reclosers

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

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

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

### Hot works

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

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

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

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

## Fireworks

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

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

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

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

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

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

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

## Communicating changes in fire seasons and restrictions or prohibitions

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

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

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

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

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

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

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

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

## Fire permits

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

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

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

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

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

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

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

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

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

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

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

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

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

## When a permit is needed

The need for a fire permit is based on:

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

## Fire types

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

- Authorised (no permit required)
- Permit required

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

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

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

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

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

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

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

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



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

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

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

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

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

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

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

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

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

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

## Applying for a permit

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

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

## Assessment

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

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

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

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

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

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

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

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

## Mandatory conditions

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

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

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

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

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

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

## Firebreaks

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

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

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

## Fire hazard removal

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

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

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

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

## Reporting fire hazards

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

## Assessment of fire hazards

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

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

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

## Initial review

The assessor starts by answering four key questions:

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

## Risk assessment matrix

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

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

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

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

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

## Outcomes from the fire hazard assessment

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

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

## Powers of entry

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

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

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

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

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

## Fire hazard removal notice (section 65)

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

The notice:

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

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

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

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

## Imminent danger notice (section 68)

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

Anyone receiving the verbal notice should be able to understand:

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

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

## Regulatory compliance

### Fire and Emergency's role

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

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

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

## Contact Fire and Emergency

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

### General enquiries and questions

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

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

### Lodge a complaint

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

### Fire hazards

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

### Local contacts for this plan

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



## Glossary

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

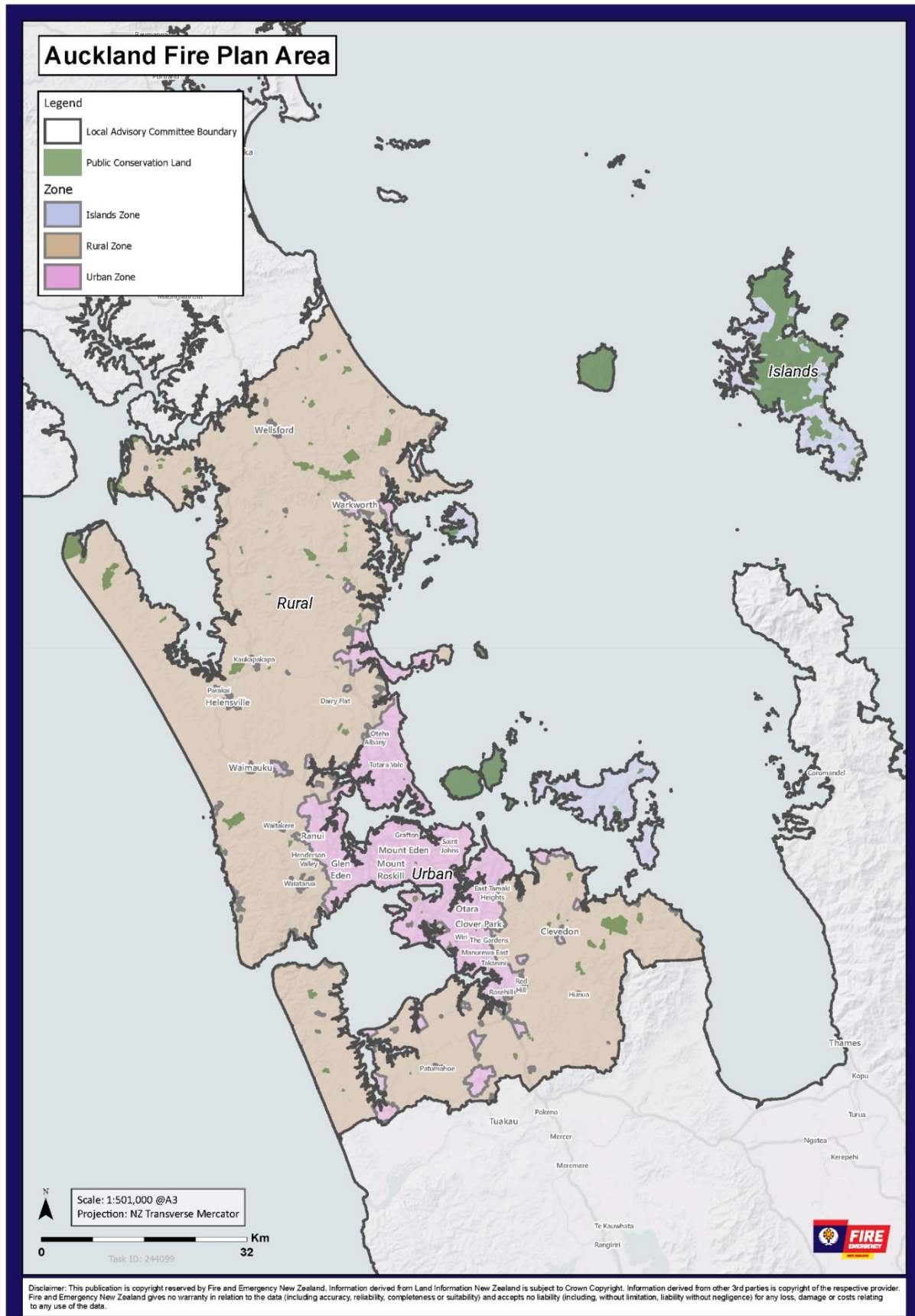
**Public conservation land (PCL)** – land used for conservation purposes, including National Parks and forest parks. Often managed by Department of Conservation or the regional council.

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

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

## Tāmaki Makaurau (Auckland) information

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



## Area overview

### Geography

The geographic size and diverse topography of Tāmaki Makaurau create a number of fire risks.

The geographic boundary of Tāmaki Makaurau includes an area of 6,379 km<sup>2</sup>. The varied fire environment of the area makes it vulnerable to multiple fire risks.

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

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

Numerous north-facing slopes and coastal areas contain high flammable vegetation and can be subject to extreme weather conditions. The Tāmaki Makaurau landscape includes many steep slopes, created through volcanic eruption and lava flow. These can be found in both the rural and urban areas, many of which are highly populated due to settlement patterns. Fire has a preheating effect on slopes, in general for every 10 degrees of uphill slope, the speed of fire doubles.

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

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

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

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

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

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

Tāmaki Makaurau has a rich heritage, which is valued by its residents. Over 90 percent of people reported they thought heritage was either important or very important<sup>1</sup>.

The city has 2,494 protected historic heritage places, 17 historic areas plus Scientific Reserves.

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

<sup>1</sup> Auckland Council 2019 Heritage Survey

identifiable and are vulnerable to fire, fire mitigation measures and fire suppression activity.

Sixty-eight percent of Tāmaki Makaurau heritage buildings were built between 1898s and 1920's<sup>2</sup>. Many of the city's historic buildings are wooden structures, making them particularly susceptible to fire.

## Demographics

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

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

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

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

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

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

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

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

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

### **Tāmaki Makaurau is the fourth most diverse city in the world**

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

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

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

<sup>2</sup> Auckland's Heritage Counts 2019 Annual Summary

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

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

Tāmaki Makaurau had the highest growth in its Asian population.

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

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

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

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

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

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

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

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

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

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

One in five inhabitants of Tāmaki Makaurau was identified as disabled in the 2013 Disability survey.

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

### Deprivation Index

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

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

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

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

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

### Zones

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



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

- [Rural Zone](#), this includes:
  - Forestry
  - Department of Conservation (DOC) lands
  - Urban-rural interface
  - Mainland rural
  - Open space park
  - Whenuapai
- [Urban Zone](#)
- [Islands Zone](#), including:
  - Conservation Islands (including all DOC islands)
  - Populated islands

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

Intertidal areas come under the rules of the adjoining zone.

### New Zealand Defence Force

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

- Whenuapai Airbase

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

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

### Frequency of elevated fire danger

This area experiences a number of extreme and high fire danger days:

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

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

### Fire history

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

Year	Fire	Cause
2021	Duder Regional Park	Campfire
2021	Greenhithe Local Park (5ha)	Mowing



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

### Wildfire threat analysis

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

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

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

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

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

### Reducing the risk in Tāmaki Makaurau

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

- Social Media:
  - Support of national campaigns (e.g. smoke alarm)
  - Fire season campaigns (e.g. fire permits, grapefruit)

- Engagement campaigns (e.g. special events post: open day, firefighter profile, International Firefighters day)
- Fire safety advise campaigns (e.g. extreme weather conditions, rural fire safety, incidents outcome)
- Signage for target markets in public places (e.g. petrol stations, community boards, fishing bait freezer lids)
- Updating roadside signage to show the current fire season
- Evaluating and assessing fire hazards
- Educational visits and letters post fires
- Ethnic media releases
- Working with the leadership of ethnic community networks
- Advice and educational letters for the reduction of fire hazards
- Liaising with stakeholder for the development of fire prevention material
- Issuing fire permits based on fire season
- Joint letter box mailbox drops around each of the maunga before the fire season
- Joint fire safety advice with Auckland Regional Parks to high risk properties
- Advertisements to market target public (e.g. Franklin Planner)
- Initiating prohibited or restricted fire seasons
- Fire and Emergency representatives attending community events such as AMP days and local school galas, festivals, etc.

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

Entity	Bylaw/Plan/ Legislation	Function
Auckland Council	<a href="#">Auckland Unitary Plan Section 14 (Air Quality)</a>	<ul style="list-style-type: none"> <li>● Outdoor burning rules in order to maintain and enhance air quality</li> <li>● Smoke nuisance and risk</li> <li>● Restricts on fireworks on private property</li> </ul>
	<a href="#">Auckland Unitary Plan Section 36 Hazards and Flooding</a>	<ul style="list-style-type: none"> <li>● Ensures that plan provisions for subdivision and vegetation management appropriately take into account wildfire hazards.</li> </ul>
	<a href="#">Ngā ture ā-rohe noho āhuru tūmatanui, hōhā noa rānei Public Safety and Nuisance Bylaw 2013</a>	<ul style="list-style-type: none"> <li>● Restricts of fireworks in public places to protect public safety and prevent nuisance.</li> <li>● Restricts lighting of fires in public places and cooking fires in council-controlled public places.</li> <li>● (This bylaw supports implementation of the Regional Parks Management Plan 2010 which limits open fires, including portable cookers, to designated areas to minimise public safety risk and damage)</li> </ul>
	<a href="#">Regional Park Management Plan 2010, s 8.4.2. Fire</a>	<ul style="list-style-type: none"> <li>● Only permits the public use of open fires, including portable barbecues using solid fuels, in designated areas.</li> <li>● Prohibits smoking in regional park.</li> <li>● Prohibits fireworks in regional parks.</li> <li>● Sets structure for vegetation management and risk reduction to prevent unwanted fire or fire spreading.</li> </ul>

Entity	Bylaw/Plan/ Legislation	Function
	<a href="#">Ture ā-Rohe Hokohoko, Whakahaerenga I ngā Wāhi Tūmatanui 2015</a> <a href="#">Trading and Events in Public Places Bylaw 2015</a>	<ul style="list-style-type: none"> <li>Requires approval (via a permit issued by Council) for a public fireworks display (classified as a temporary event in the bylaw) in council-controlled public places.</li> </ul>
	<a href="#">Ture ā-Rohe Mahi Urungi Āhuru 2014 - Navigation Safety Bylaw 2014.</a>	<ul style="list-style-type: none"> <li>The Navigation Safety Bylaw addresses vessel operations in relation to hot works that are carried out on vessels<sup>1</sup> and carriage of fuel oil/bunkering operations<sup>2</sup>. These activities can create a fire risk and could be considered relevant references for inclusion in the plan.</li> </ul>
Auckland Transport	<a href="#">Trading and Events in Public Places Bylaw 2015</a>	<ul style="list-style-type: none"> <li>Requires approval (via a permit issued by Council) for a public fireworks display (classified as a temporary event in the bylaw) in council-controlled public places.</li> </ul>
	<a href="#">Public Safety and Nuisance Bylaw 2013</a>	<ul style="list-style-type: none"> <li>Restricts of fireworks in public places to protect public safety and prevent nuisance.</li> <li>Restricts lighting of fires in public places and cooking fires in council-controlled public places.</li> <li>(This bylaw supports implementation of the Regional Parks Management Plan 2010 which limits open fires, including portable cookers, to designated areas to minimise public safety risk and damage)</li> </ul>
Department of Conservation Te Papa Atawhai	<a href="#">Auckland: Conservation management strategies</a>	<ul style="list-style-type: none"> <li>Describes conservation values present in Auckland and provides guidance for DOC's work in the form of a vision, objectives, outcomes for Places, policies, and milestones; translating DOC's strategic outcomes to Auckland.</li> </ul>
	<a href="#">Hauraki Gulf Maritime Park Bylaws</a>	<ul style="list-style-type: none"> <li>Only permits the public use of open fires, including portable barbecues using solid fuels, in designated areas.</li> </ul>
Central Government	<a href="#">The Civil Defence Emergency Management Act 2002</a>	<ul style="list-style-type: none"> <li>The Civil Defence Emergency Management National Plan will have effect for 10 years, or until formally amended or reviewed in full or in part. The term is 2014 to 2024 but may be extended with ministerial approval.</li> <li>The Civil Defence Emergency Management Act 2002 creates a framework within which New Zealand can prepare for, deal with, and recover from local, regional and national emergencies.</li> </ul>
Auckland Emergency Management	<a href="#">Auckland Civil Defence and Emergency Management Group Plan 2016</a>	<ul style="list-style-type: none"> <li>Provides for a coordinated and integrated approach to the management of significant risk and hazards in Auckland.</li> </ul>

## Local contacts

Email: [AucklandFirePlan@FireandEmergency.nz](mailto:AucklandFirePlan@FireandEmergency.nz)

## Schedule of stakeholders

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

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

## National-level stakeholders

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

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

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

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

## Area-level stakeholders

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

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

Stakeholder	Fire plan development	Fire plan amendment	Changing fire season to prohibited	Section 52 fire prohibitions	Section 52 restrictions/prohibitions on activities
Ministry of Primary Industries	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
New Zealand Police	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
New Zealand Transport Agency	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Consult with if activity type affects operations
North Shore Airport	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Northland Rural Support Trust	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
NZ Defence Force	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Property owners	Public consultation	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Public	Public consultation	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
St John Ambulance	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Waikato Rural Support Trust	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Watercare Services Ltd	Consulted while creating plan	Public consultation	Notify via public channels	Consult with if activity type affects operations	Consult with if activity type affects operations
Independent Māori Statutory Board	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels

Stakeholder	Fire plan development	Fire plan amendment	Changing fire season to prohibited	Section 52 fire prohibitions	Section 52 restrictions/prohibitions on activities
Ngāti Manuhiri	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Ngātiwai Trust	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Tūpuna Maunga Authority	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Consult with if activity type affects operations
Te Kawerau a Maki	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Te Runanga o Ngāti Whātua	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Te Uri o Hau	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Ngāti Rehua - Ngātiwai Ki Aotea Trust	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Ngāti Te Ata Waiohua	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Ngāti Whātua o Kaipara	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Ngāti Whātua o Ōrākei	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Te Ahiwaru Waiohua	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Te Ākitai Waiohua Iwi Authority	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Ngāti Paoa Trust Board	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels



Stakeholder	Fire plan development	Fire plan amendment	Changing fire season to prohibited	Section 52 fire prohibitions	Section 52 restrictions/prohibitions on activities
Ngāti Tamaoho Trust	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Te Patukirikiri Iwi Trust	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Waikato-Tainui	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Ngāi Tai ki Tāmaki	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Ngāti Tamaterā	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Ngāti Maru Runanga Trust	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Ngāti Whanaunga Incorporated Society	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Te Kupenga o Ngāti Hako Inc	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels

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

## Zone information

### Rural zone

#### Geography

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

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

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

Further rural and coastal settlements are distributed across the area.

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

- Beachlands
- Maraetai
- Pukekohe
- Waiuku

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

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

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

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

The Waitākere Ranges and its foothills and coasts comprise an area of some 17 000 ha of public and private land located between metropolitan Auckland and the west coast of Waitākere City and Rodney District. The area is of local, regional, and national significance. The Waitākere Ranges Heritage Act 2008, recognises the national, regional and local significance of the Ranges and promotes the protection and enhancement of its heritage features for present and future generations. The ranges contain several small community settlements such as Piha, Karekare, Huia and Waiaatarua along with isolated beach locations.

## Demographics

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

### Population

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

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

The predominant population group is New Zealand European.

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

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

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

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

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

### Home and living

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

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

## Climate/weather

Tāmaki Makaurau experiences a subtropical climate. The region lies some 36 degrees of latitude south and a longitude of 175 degrees east. Summers tend to be warm and humid while winters are relatively mild, and many parts of the region only receive a few frosts each year.

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

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

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

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

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

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

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

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

The current climate summaries from NIWA has shown that the last three years have experienced very warm fire seasons. With 2020 being New Zealand's seventh warmest year on record, 2019 recorded as the fourth and 2018 being New Zealand's second-equal warmest year on record. This has resulted in significantly reduced soil moisture and higher temperatures across the zones.

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

[https://niwa.co.nz/static/web/Auckland\\_Climate\\_NIWA.pdf](https://niwa.co.nz/static/web/Auckland_Climate_NIWA.pdf)

## Land cover/ land use

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

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

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

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

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

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

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

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

## 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
Construction <ul style="list-style-type: none"> <li>Spark causing activities</li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Accommodation <ul style="list-style-type: none"> <li>People unfamiliar with fire risk and rules around fire</li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Food/hospitality <ul style="list-style-type: none"> <li>Impact from restrictions on activities to supplier</li> </ul>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Primary production, including horticulture and agriculture, vineyards, tobacco <ul style="list-style-type: none"> <li>Use of machinery – sparks</li> <li>Use of fire for land management</li> <li>Relevant operations affected</li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Forestry <ul style="list-style-type: none"> <li>Use of machinery – sparks</li> <li>Relevant operations affected</li> <li>Use of firebreaks</li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

The rural north has a strong local economy driven by growth in construction, accommodation and food. Horticulture and other farming activities are also important but employment in these sectors has generally declined. Forestry is strongly concentrated the Rodney area.

Beverage, tobacco manufacture and fruit growing are also represented viticulture in and around Matakana.

The construction industry is the single largest contributor to job growth in the rural north, accounting for 22.5 percent of new jobs in the five years leading up to 2018. Within construction, landscape construction and site preparation related employment are the most significant.

The southern rural economy is more diverse. Construction services and building construction have seen the greatest employment growth over the last five years with accommodation and food services also seeing a large increase. Farming and agricultural sectors saw decreases in employment over the same period.

Over the five years leading to 2018, the fastest growing industries by GDP in the rural southern area were transport, accommodation, food services and construction.

### Lifeline utilities/other infrastructure

Lifeline utility/ other infrastructure	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures
Roading network <ul style="list-style-type: none"> <li>Sparks from vehicle malfunction, discarded cigarettes</li> <li>Spark causing activities during road maintenance and mowing</li> </ul>	☒	☒	☐
Railway line <ul style="list-style-type: none"> <li>Sparks from passing trains and during track maintenance</li> </ul>	☒	☒	☐
Fuel and natural gas distribution networks <ul style="list-style-type: none"> <li>Gas leaks</li> <li>Protected by own controls on use of fire and other activities in vicinity</li> </ul>	☒	☒	☒
Water – Supply catchment areas, dams, reservoirs, treatment plants <ul style="list-style-type: none"> <li>Protect by applying controls to surrounding areas</li> </ul>	☒	☐	☒
Electricity transmission lines <ul style="list-style-type: none"> <li>Sparking during high winds</li> <li>Use of auto-reclosers limited in high fire danger</li> <li>Recommended vegetation mitigation practices</li> </ul>	☒	☒	☐
Telecommunications network and towers <ul style="list-style-type: none"> <li>Protect by applying controls to surrounding areas</li> </ul>	☐	☐	☒

### Transport

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



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

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

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

**Fuel and gas**

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

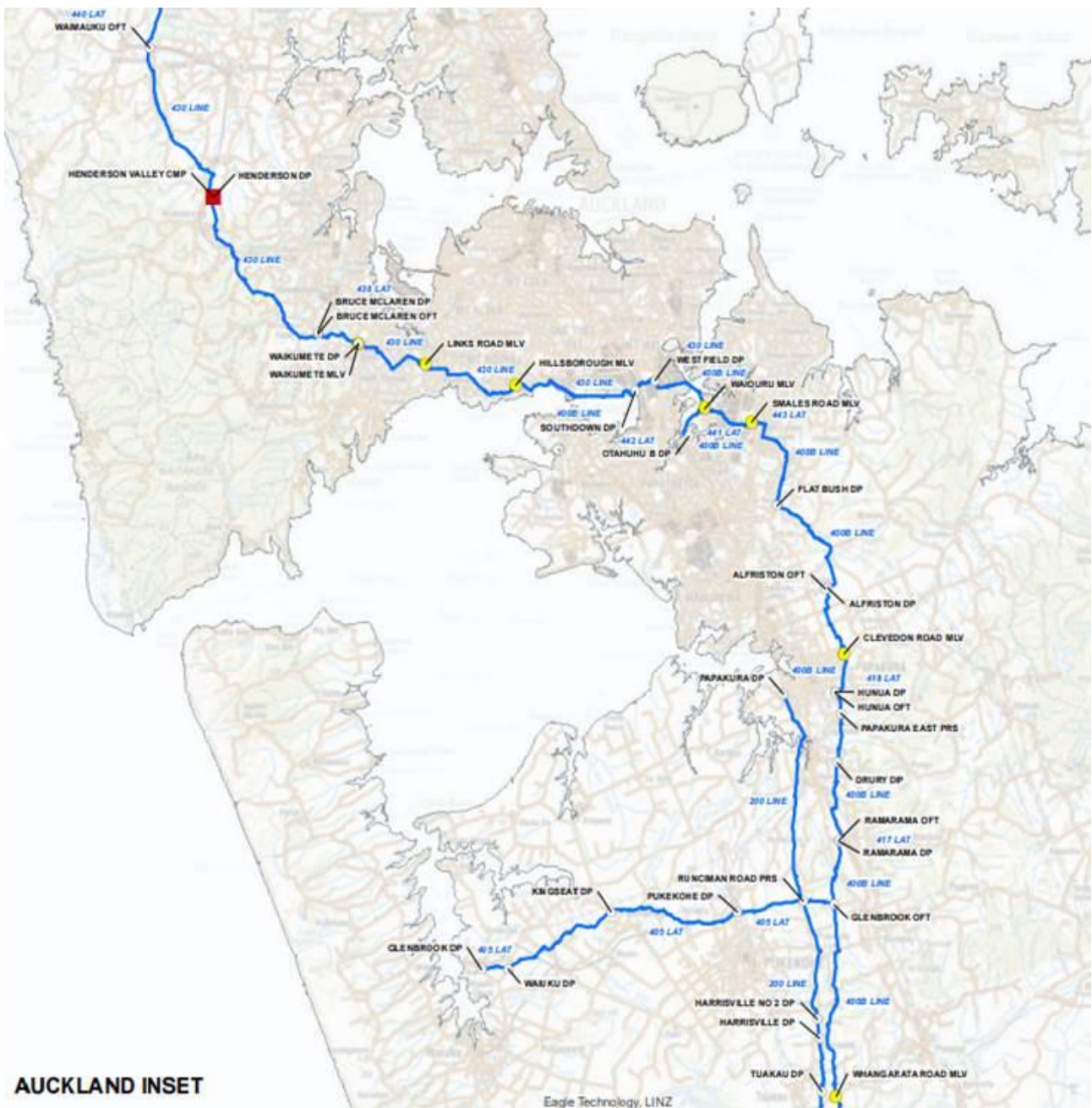


Image by Eagle Technology LINZ

### Water infrastructure

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

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

### Electrical

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

### Recreational locations

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

- Regional parks
- Local parks
- Beaches
- Art walks
- Forestry with high recreation activity
- Islands of the Hauraki Gulf

### 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.

Activities and events	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures
Marae – hāngī and other cultural fires	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Agricultural events and markets <ul style="list-style-type: none"> <li>• Use of machinery - sparks</li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Festivals, particularly held over multiple days with camping <ul style="list-style-type: none"> <li>• Campfires</li> <li>• Increase in people without knowledge of fire risk or rules</li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>



Activities and events	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures
Fireworks <ul style="list-style-type: none"> <li>• Use may be prohibited during high fire danger. Prohibited under S52 in some locations</li> <li>• Pyrotechnics managed by other approvals</li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Horse riding, mountain biking <ul style="list-style-type: none"> <li>• Access restricted during high fire danger</li> </ul>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Motorsports e.g. rally, 4WD and dirt biking <ul style="list-style-type: none"> <li>• High temperature operating parts and sparks from vehicles</li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Hunting, camping, hiking or tramping <ul style="list-style-type: none"> <li>• Campfires</li> <li>• Access restricted during high fire danger</li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Beach fires <ul style="list-style-type: none"> <li>• Campfires</li> <li>• Ecological values at risk</li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

### Special risk areas

Special risk area	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures
Pakiri – duneland vegetation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Kaipara South Head Peninsula – duneland vegetation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Kaipara Harbour – estuarine habitat	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Hūnua Ranges and Waitākere Ranges – native forest and shrubland, rare and endangered flora and fauna	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Āwhitu Peninsula – freshwater wetlands, dune lakes, threatened ecosystems	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Water – Supply catchment areas within the Hūnua and Waitākere Ranges	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Regenerating dunes	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

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

The Waitākere Ranges and their foothills and coasts comprise an area of some 17,000 hectares of public and private land located between metropolitan Auckland and the west coast of the former Waitākere City and Rodney District. The area is of local, regional, and national significance and includes 250km of walking track including the Hillary Trail challenge and Ark in the Park open sanctuary at Cascades Kauri Park as it featured an intact forest remnant and is home to iconic species such as the Hochstetter's frog and long-tailed bat (pekapeka). Kōkako were introduced in 2009. The Waitākere Ranges Heritage Act 2008 recognises the national, regional and local significance of the Ranges and promotes the protection and enhancement of heritage features for present and future generations. The Ranges contain several small community settlements such as Piha, Karekare, Huia and Waiatarua along with isolated beach locations.

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

Kaipara south head has some of the most intact duneland and shrubland sequences in the North Island. Along with Pakiri it is home to the critically endangered fairy tern.

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

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

#### **Other areas with higher risk**

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

#### **Known fire hazards**

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

### Frequency of elevated fire danger

On average this zone experiences the number of extreme and high fire danger days:

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

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

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

### Fire history

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

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

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

### Predominant fuel type

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

## Thresholds

### Fire seasons

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

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

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

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

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

Other local thresholds have not been set.

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

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

#### Forestry operations and access

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

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

#### Roadside mowing

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

#### Mowing, ploughing or harrowing fields

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

#### Hot works

Work with forestry operations and other industry to assist in planning guidance around triggers of possible restrictions on hot works activities. We consult with local industry on what mitigations they will apply during times of increased fire risk.

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**Representative  
remote  
automated  
weather stations**

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

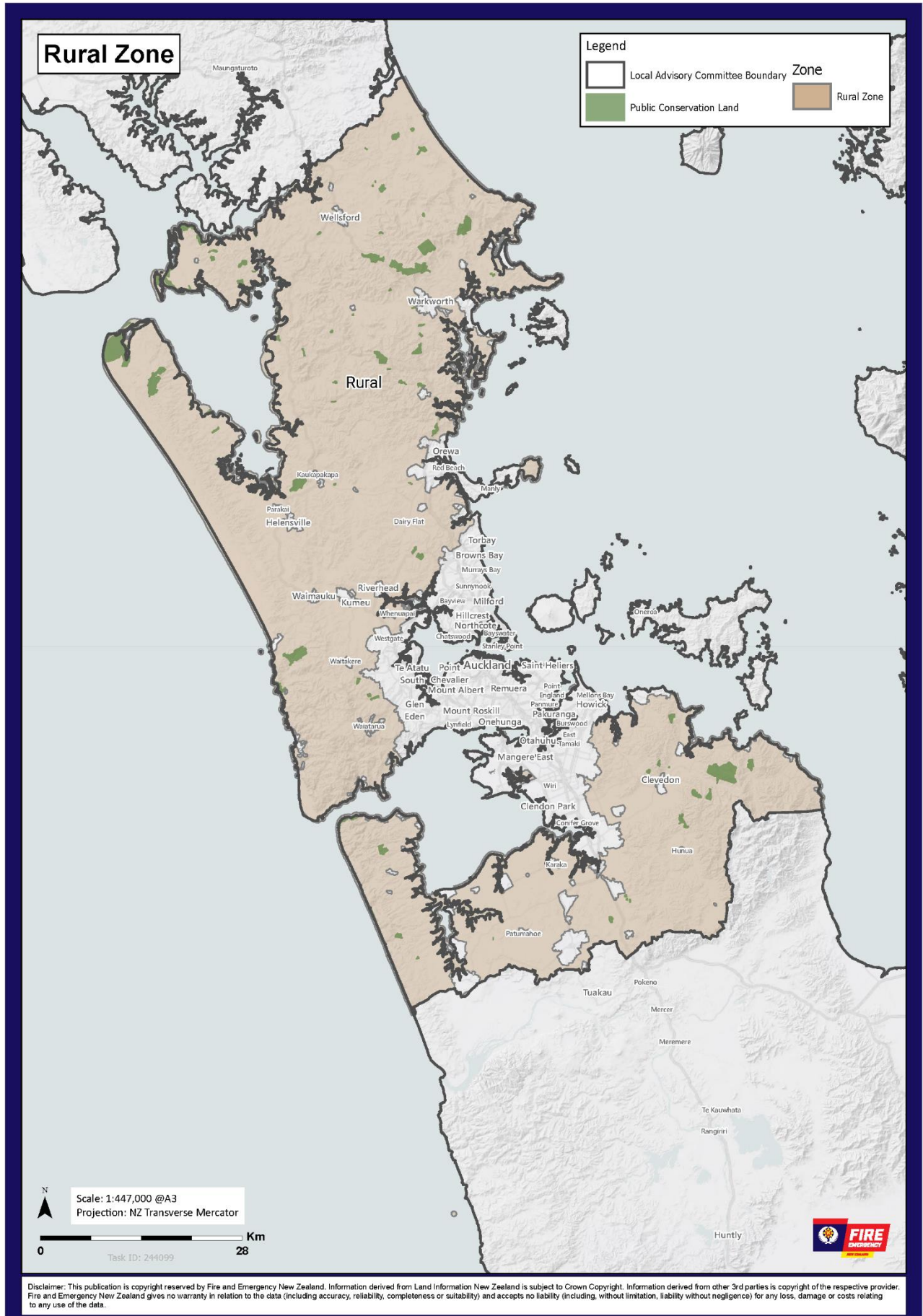
Kaipara	Te Akau
Woodhill	Waharau
Cornwallis Depot	Clevedon Coast
Patumahoe	Mahurangi Forest

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

Over the next two years an additional 5 RAWS will be added to the Auckland region.

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Rural zone map



**Rural zone stakeholders**

Stakeholder	Fire plan development	Fire plan amendment	Changing fire season to prohibited	Section 52 fire prohibitions	Section 52 restrictions/prohibitions on activities
Ardmore Airport	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Auckland Council (including Local Boards)	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Auckland Transport	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Department of Conservation	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Federated Farmers of New Zealand	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Hancock Forest Management	Consulted while creating plan	Public consultation	Notify via public channels	Consult with if activity type affects operations	Consult with if activity type affects operations
Kiwi Rail	Public consultation	Public consultation	Notify via public channels	Notify via public channels	Consult with if activity type affects operations
Ministry of Primary Industries	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
New Zealand Police	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
New Zealand Transport Agency	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Consult with if activity type affects operations
North Shore Airport	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels

Stakeholder	Fire plan development	Fire plan amendment	Changing fire season to prohibited	Section 52 fire prohibitions	Section 52 restrictions/prohibitions on activities
Northland Rural Support Trust	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
NZ Defence Force	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Property owners	Public consultation	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Public	Public consultation	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
St John Ambulance	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Waikato Rural Support Trust	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Watercare Services Ltd	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Consult with if activity type affects operations
IMSB	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Ngāti Manuhiri	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Ngātiwai Trust	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Tūpuna Maunga Authority	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Consult with if activity type affects operations
Te Kawerau a Maki	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels



Stakeholder	Fire plan development	Fire plan amendment	Changing fire season to prohibited	Section 52 fire prohibitions	Section 52 restrictions/prohibitions on activities
Te Runanga o Ngāti Whātua	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Te Uri o Hau	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Ngāti Te Ata Waiohua	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Ngāti Whātua o Kaipara	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Ngāti Whātua o Ōrākei	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Te Ahiwaru Waiohua	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
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Te Kupenga o Ngāti Hako Inc	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels

## Mainland Urban zone

### Geography

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

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

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

### Demographics

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

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

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

Asian populations have increased most across the urban area of Tāmaki Makaurau.

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

Hillsborough, Lynfield, Mount Roskill, Roskill South, Three Kings, Waikōwhai and Wesley has the largest proportion of Asian people in Tāmaki Makaurau, making up 49 percent of its population base.

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

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

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

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

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

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

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

### **There are polarising levels of deprivation across urban Tāmaki Makaurau**

While the deprivation index for the area has an average of 5.5. In some areas such as inner west or inner south-east significant portions of the population rate high on the deprivation index.

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

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

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

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

## **Climate/ weather**

The mainland urban zone is strongly influenced by the coastal influences of the three harbours, the Waitākere Ranges and Hūnua Ranges. The predominant winds and weather patterns are from the South-West to West with the Waitākere ranges and Hūnua Ranges receiving the bulk of the rainfall compared to the eastern areas of the mainland.

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

## **Land cover/ land use**

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

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

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

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

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

Whau, Henderson-Massey and the western part of Upper Harbour Local Board mostly comprise low-lying, fertile soils that have been intensively developed for food production, urban or industrial use. Almost three quarters (70 percent) of the total area has been developed for urban use. Very little native vegetation remains on the land.

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

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

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

## Industry

Industry	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures
Large-scale construction <ul style="list-style-type: none"> <li>• Spark causing activities</li> </ul>	☒	☒	<input type="checkbox"/>
State housing redevelopment <ul style="list-style-type: none"> <li>• Spark causing activities</li> </ul>	☒	☒	<input type="checkbox"/>
Tourism, including international visitors <ul style="list-style-type: none"> <li>• Increase in people without knowledge of fire risk or rules</li> </ul>	☒	☒	<input type="checkbox"/>

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

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

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

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

Housing New Zealand currently has around 100 state housing redevelopments underway as part of The Auckland Housing Programme (AHP). Homes. Land. Community. (HLC) that aims to deliver 23,600 new residences over the next 10 years on state-owned land across Tāmaki Makaurau. In addition to this, suburban infill and expansion into the rural fringe has the potential to create unwanted fire.

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

Until the Covid-19 pandemic, Tāmaki Makaurau was averaging over 2.5 million visitors a year through the Auckland Airport. In the past five-year period between March 2013 and 2018, visitor spend within the Tāmaki Makaurau region increased from \$5.4 billion to \$8.4 billion. International visitor arrivals increased by more than 840,000 in the same period. The four major sources of international visitors

for Tāmaki Makaurau are Australia, China, the USA, and the UK. With this high level of visitor traffic, over half of which are visiting New Zealand on holiday, there is potential for unwanted or unpermitted fires occurring in our forests or open space as the tourists use and camp with little knowledge of the risks and rules put in place to mitigate a fire.

### Lifeline utilities/other infrastructure

Lifeline utility/ other infrastructure	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures
Roding network <ul style="list-style-type: none"> <li>Sparks from vehicle malfunction, discarded cigarettes</li> <li>Spark causing activities during road maintenance and mowing</li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Railway line <ul style="list-style-type: none"> <li>Sparks from passing trains and during track maintenance</li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Airports <ul style="list-style-type: none"> <li>Requirement for notification and permission for burns in flight path, under CAA rules</li> <li>Protected by own controls on use of fire and other activities in vicinity</li> </ul>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Marinas <ul style="list-style-type: none"> <li>Protect by applying controls to surrounding areas</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Freight hubs <ul style="list-style-type: none"> <li>Protect by applying controls to surrounding areas</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Fuel and gas lines and storage <ul style="list-style-type: none"> <li>Protected by own controls on use of fire and other activities in vicinity</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Water dams, reservoirs and treatment plants <ul style="list-style-type: none"> <li>Protect by applying controls to surrounding areas</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Wastewater treatment plants <ul style="list-style-type: none"> <li>Protect by applying controls to surrounding areas</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Telecommunications network and towers <ul style="list-style-type: none"> <li>Protect by applying controls to surrounding areas</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Lifeline utility/ other infrastructure	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures
Electricity transmission lines <ul style="list-style-type: none"> <li>• Sparking during high winds</li> <li>• Use of auto-reclosers limited in high fire danger</li> <li>• Recommended vegetation mitigation practices</li> </ul>	☒	☒	☐

### Motorways and rail lines increase the risk of wildfire

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

### Recreational locations

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

- Local Parks
- Art walks

### Cultural and recreational activities and events

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

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

Large scale events that might be cancelled 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.

Activities and events	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures
Marae – hāngī and other cultural fires	☒	☒	☐
Agricultural events and markets <ul style="list-style-type: none"> <li>• Use of machinery - sparks</li> </ul>	☒	☐	☒

Activities and events	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures
Festivals, particularly held over multiple days with camping <ul style="list-style-type: none"> <li>• Campfires</li> <li>• Increase in people without knowledge of fire risk or rules</li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Fireworks <ul style="list-style-type: none"> <li>• Use may be prohibited during high fire danger. Prohibited under S52 in some locations</li> <li>• Pyrotechnics managed by other approvals</li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Horse riding, mountain biking <ul style="list-style-type: none"> <li>• Access restricted during high fire danger</li> </ul>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Motorsports e.g. rally, 4WD and dirt biking <ul style="list-style-type: none"> <li>• High temperature operating parts and sparks from vehicles</li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Hunting, camping, hiking or tramping <ul style="list-style-type: none"> <li>• Campfires</li> <li>• Access restricted during high fire danger</li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Beach fires <ul style="list-style-type: none"> <li>• Campfires</li> <li>• Ecological values at risk</li> <li>• Marine flares</li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Art walks <ul style="list-style-type: none"> <li>• Increase in people without knowledge of fire risk or rules</li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Agricultural hobbies, e.g. non-commercial fruit, plant or tree growing, animal and bee keeping <ul style="list-style-type: none"> <li>• Burn offs</li> <li>• Less knowledge of fire risk or rules</li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



## Special risk areas

Special risk area	Contributes to increased risk of fire in high risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures
Tūpuna Maunga (ancestral mountains) <ul style="list-style-type: none"> <li>Increase in people without knowledge of fire risk or rules</li> <li>Access restricted during high danger</li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Lava forest fragments (e.g. Gribblehirst Park, Mount Eden)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Shakespear Regional Park; significant habitat and wildlife	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Paremoremo Scenic Reserve; Site of Special Wildlife Interest (SSWI).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Māngere and Otahuhu estuarine habitats	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Urban area; 1,674 sites of historic or cultural significance, 14 scheduled heritage areas <ul style="list-style-type: none"> <li>People without knowledge of fire risk or rules</li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

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

The 15 Tūpuna Maunga are:

- Matukutūruru
- Maungakiekie / One Tree Hill
- Maungarei / Mount Wellington
- Maungawhau / Mount Eden
- Maungauika / North Head
- Ōwairaka / Te Ahi-kā-a-Rakataura / Mount Albert
- Ōhinerau / Mount Hobson
- Ōhuitarangi / Pigeon Mountain
- Ōtāhuhu / Mount Richmond
- Pukewīwī / Puketāpapa / Mount Roskill
- Rarotonga / Mount Smart
- Te Kōpuke / Tītīkōpuke / Mount St John
- Takarunga / Mount Victoria
- Te Tātua a Riukiuta / Big King
- Te Ara Pueru / Te Pane-o-Mataaho / Māngere Mountain

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

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

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

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

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

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

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

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

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

#### Known fire hazards

- Closed landfills
- Recycling centres
- Scrapyards

#### Frequency of elevated fire danger

On average, this zone experiences:

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

**Fire history**

The known fire history for this zone includes:

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

**Predominant fuel type**

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

**Thresholds****Fire seasons**

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

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

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

Considerations include:

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

the Auckland Council has rules relating to outdoor burning within the urban zones

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

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

Other local thresholds have not been set.

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

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

**Forestry operations and access**

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

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

**Roadside mowing**

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

**Mowing, ploughing or harrowing fields**

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

**Hot works**

Work with forestry operations and other industry to assist in planning guidance around triggers of possible restrictions on hot works activities. We consult with local industry on what mitigations they will apply during times of increased fire risk.

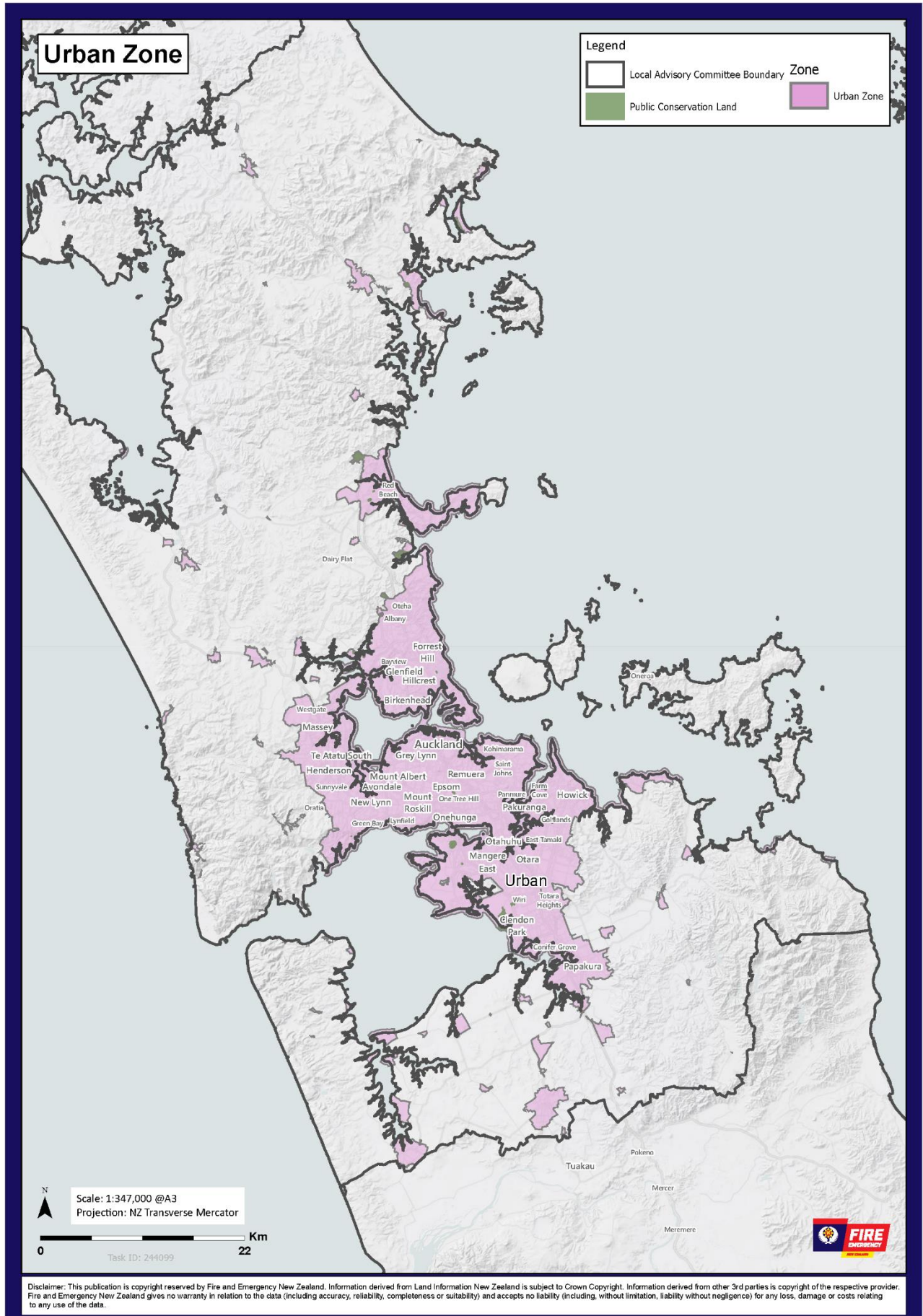
**Representative remote automated weather stations**

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

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

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

Mainland Urban zone map



## Mainland urban zone stakeholders

Stakeholder	Fire plan development	Fire plan amendment	Changing fire season to prohibited	Section 52 fire prohibitions	Section 52 restrictions/prohibitions on activities
Tūpuna Maunga Authority	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Consult with if activity type affects operations
Auckland Council (including Local Boards)	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Consult with if activity type affects operations
Te Kawerau a Maki	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Te Runanga o Ngāti Whātua	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Te Uri o Hau	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Ngāti Te Ata Waiohua	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Ngāti Whātua o Kaipara	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
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Te Kupenga o Ngāti Hako Inc	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels



## Island zones

### Geography

These include populated rural and urban islands and conservation islands.

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

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

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

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

### Demographics

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

#### Population

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

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

#### Ethnicity

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

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

The population is relatively stable with few new migrants.

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

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

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

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



**Aotea (Great Barrier) Island**

- 91.3 percent identified as European (compared to 53.5 percent Tāmaki Makaurau).
- 20.5 percent identified as Māori (compared to 11.5 percent Tāmaki Makaurau).
- 2.6 percent identified as Pacific Peoples (compared to 15.5 percent Tāmaki Makaurau).
- 1.6 percent identified as Asian ethnicity (compared to 28.2 percent Tāmaki Makaurau).
- 192 people identify as Māori in 2018 + 42 (28.0 percent) since the 2013 Census
- 14.0 percent overseas-born residents of Aotea (Great Barrier) arrived in the last 4 years.
- 0.3 percent of Aotea (Great Barrier) residents cannot speak English

**Waiheke Island**

- 88.9 percent identified as European (compared to 53.5 percent Tāmaki Makaurau).
- 11.4 percent identified as Māori (compared to 11.5 percent Tāmaki Makaurau). 1,035 Māori usually live in Waiheke. This is an increase of 147 people, or 16.6 percent, since the 2013 Census.
- 4.0 percent identified as Asian ethnicity (compared to 28.2 percent Tāmaki Makaurau).
- 3.8 percent identified as Pacific Peoples (compared to 15.5 percent Tāmaki Makaurau).
- 342 people identify as Pacific in 2018 + 111 (48.1 percent) since the 2013 Census
- 3.1 percent of Waiheke residents cannot speak English.
- 24.7 percent overseas-born residents of Waiheke arrived in the last 4 years.

**Home and living**

Less than 20 percent of residents on GBI earn over \$30K in 2018. Ten percent of residents live in overcrowded. There are high levels of deprivation across the island, with 17 percent of residents rating 10 on the deprivation index.

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

**Climate/weather**

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

**Land cover/  
land use**

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

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

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

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

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

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

**Industry**

Industry	Contributes to increased risk of fire in high-risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures
Tourism and recreation <ul style="list-style-type: none"> <li>• People unfamiliar with local fire risk and rules</li> <li>• Access to locations may be restricted</li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Primary production, including horticulture and agriculture <ul style="list-style-type: none"> <li>• Use of machinery – sparks</li> <li>• Use of fire for land management</li> <li>• Relevant operations affected</li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Fishing <ul style="list-style-type: none"> <li>• Campfires and flares</li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Construction <ul style="list-style-type: none"> <li>• Spark causing activities</li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

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

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

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

#### Aotea (Great Barrier) Island

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

#### Waiheke

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

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

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

#### Lifeline utilities/other infrastructure

Lifeline utility/ other infrastructure	Contributes to increased risk of fire in high-risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures
Electricity transmission lines <ul style="list-style-type: none"> <li>• Sparking during high winds</li> <li>• Use of auto-reclosers limited in high fire danger</li> <li>• Recommended vegetation mitigation practices</li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Airport <ul style="list-style-type: none"> <li>• Requirement for notification and permission for burns in flight path, under CAA rules</li> <li>• Protected by own controls on use of fire and other activities in vicinity</li> </ul>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ferry terminals <ul style="list-style-type: none"> <li>• Protect by applying controls to surrounding areas</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Generators <ul style="list-style-type: none"> <li>• Spark and heat causing activity</li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Recreational locations**

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

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

**Cultural and recreational activities and events**

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

**Special risk areas**

Special risk area	Contributes to increased risk of fire in high-risk conditions	Affected by use of fire control measures	Needs to be protected by using fire control measures
Aotea (Great Barrier) Island: <ul style="list-style-type: none"> <li>• protected native vegetation</li> <li>• threatened wildlife</li> <li>• freshwater wetlands, saltmarsh and duneland</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Waiheke and neighbouring islands: <ul style="list-style-type: none"> <li>• significant seabird breeding areas</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
All islands – 228 scheduled heritage sites and three heritage areas	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Hauturu – Important intact eco system with numerous threatened species especially kokako, tieke short-tail bats	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Tititiri Matangi – Restored island with important population of hihi and intact lighthouse complex.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Rangitoto Motutapu – Pohukawa forest and populations of shore plover and takahe.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mokohinau – Important seabird and herpetofauna populations.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

These include:

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

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

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

The points above are used as consideration when setting the level of fire controls.

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

**Fire history** The known fire history for this zone includes:

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

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

## Thresholds

### Non-populated islands and Department of Conservation Islands - Prohibited year round

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

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

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

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

### Populated Islands

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

Grass Curing (GC%) (%)	Build Up Index (BUI)		
	0–40	45–60	>60
0–50	Restricted	Prohibited	Prohibited
50–80	Prohibited	Prohibited	Prohibited
>80	Prohibited	Prohibited	Prohibited

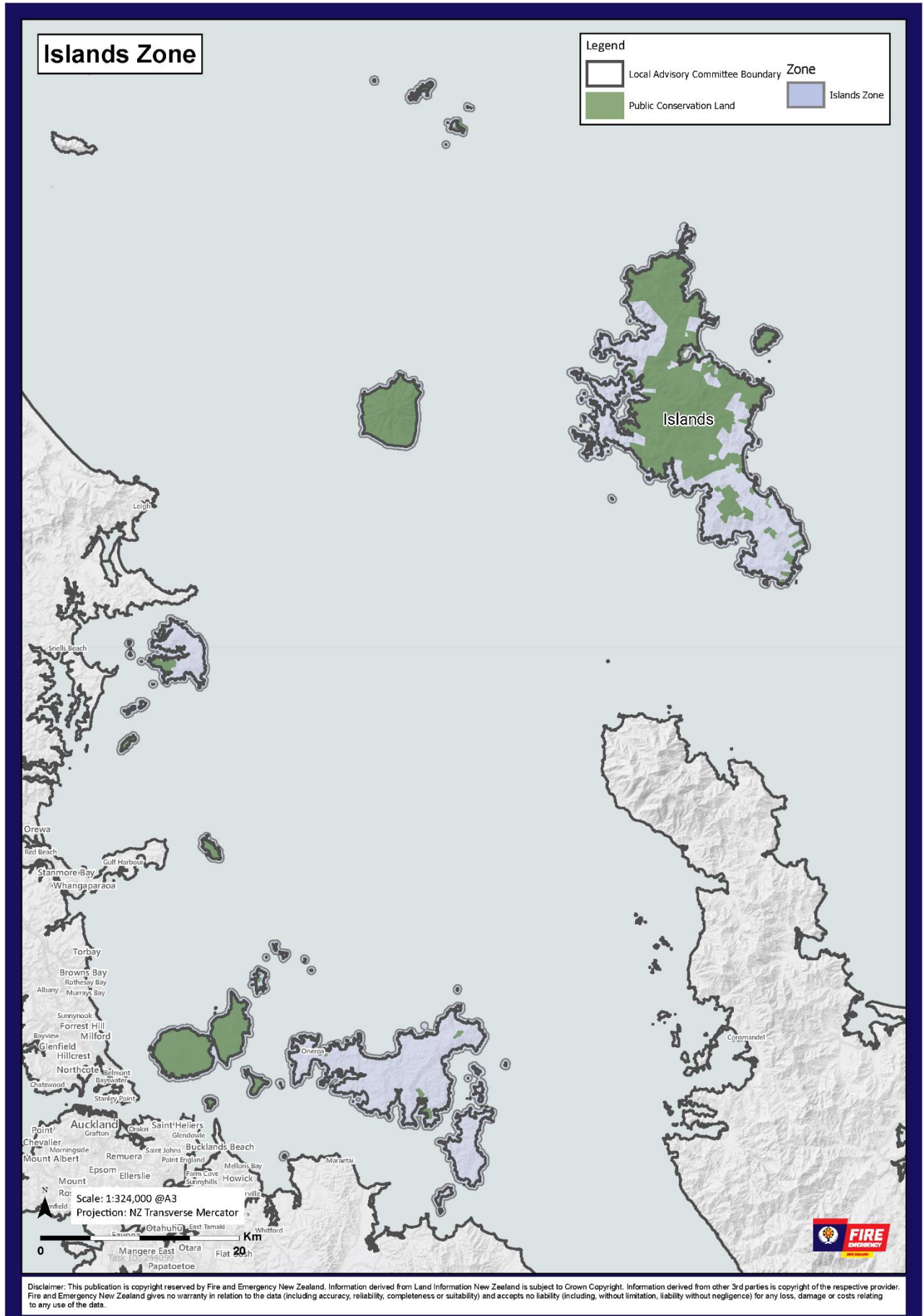
The populated Islands include Aotea (Great Barrier), Kawau, Rakino, Ponui and Waiheke will be in a prohibited season from the 1st of December or when the BUI is greater than 45, whichever comes first. The zone will then change to restricted after the 1st of April and when the BUI is less than 55.

### Representative Remote Automated Weather Stations

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

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

Islands zone map



## Island zones stakeholders

Stakeholder	Fire plan development	Fire plan amendment	Changing fire season to prohibited	Section 52 fire prohibitions	Section 52 restrictions/prohibitions on activities
Auckland Council (including Local Boards)	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Auckland Transport	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Department of Conservation	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Federated Farmers of New Zealand	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Ministry of Primary Industries	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
New Zealand Police	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
New Zealand Transport Agency	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Consult with if activity type affects operations
NZ Defence Force	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Property owners	Public consultation	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Public	Public consultation	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
St John Ambulance	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels



Stakeholder	Fire plan development	Fire plan amendment	Changing fire season to prohibited	Section 52 fire prohibitions	Section 52 restrictions/prohibitions on activities
Watercare Services Ltd	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Consult with if activity type affects operations
IMSB	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Ngāti Manuhiri	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Ngātiwai Trust	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Te Kawerau a Maki	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Ngāti Rehua - Ngātiwai Ki Aotea Trust	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Ngāti Tamaoho Trust	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Ngāi Tai ki Tāmaki	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Ngāti Tamaterā	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Ngāti Maru Runanga Trust	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels
Te Kupenga o Ngāti Hako Inc	Consulted while creating plan	Public consultation	Notify via public channels	Notify via public channels	Notify via public channels

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

## Appendix 1 - Reticulated water coverage

