



WHAKARATONGA IWI

**FIRE**  
**EMERGENCY**

NEW ZEALAND

# SAFELY USING FIRE FOR LAND MANAGEMENT

May 2018



## Introduction

Fire has been used for land management throughout history, and it is still an efficient and economical tool. In New Zealand fire is commonly used for land clearing and also for disease control in agricultural or horticultural industries. While it is a valuable tool, fire use comes with risk.

Knowledge of how to use fire safely will reduce the risk to life, property and the environment.

While Fire and Emergency New Zealand provides free advice and guidance to help ensure controlled burns are completed safely, the person who lights or causes such a fire to be lit is responsible for ensuring the fire remains safe and on completion, is completely out.



## Land management fire types

A variety of fire types may be used for land management. These include:

Fire type	Description	Used for
Crop residue or stubble burn	Controlled burn of crop residue, which is plant waste material left in the paddock after harvest, including stalks	Preparing land for replanting crops, re-grassing or for disease control
Land clearing	Controlled burn of scrub or other vegetation that is standing or modified	Preparing land for conversion, e.g. scrub to grass
Pile burn	Controlled burn of cut and heaped vegetation	Property maintenance, agricultural or horticultural activities, land clearing, land conversion
Windrow burn	Controlled burn of vegetation that is placed in long narrow rows, e.g. after forest or scrub clearing	

## Key stages

There are five key stages to work through when using fire for land management.

Safety of personnel is the highest priority at vegetation fires, and must be considered at every stage of the process.





## 1. Check

When planning to use fire for land management, the first stage is to check and comply with the legal and administrative requirements in the area you want to have the burn. Check the following:

- Fire season and permitting requirements. See the [checkitsalright.nz](https://checkitsalright.nz) website to determine what the fire season status is in your area and whether you need a permit
- Territorial authority restrictions or requirements for burning in open air, e.g. smoke and emissions
- Regional council restrictions for ensuring air quality
- Your insurance cover, including property loss and replacement from fire, and public liability insurance.

Seek advice from Fire and Emergency New Zealand so that we know what you're intending and can help to ensure you are safe and successful. Our advice is free.



**CHECK  
IT'S ALRIGHT  
BEFORE YOU LIGHT.**



## 2. Plan

Planning is the most important stage when using fire for land management. A good plan will help you to achieve your burn objectives, prevent the escape of your fire, and keep everyone and the environment safe.

When planning your burn, it is vital to consider the:

- Safety of personnel
- Location of the fire in relation to neighbouring property and the protection of those adjacent values
- Weather patterns of your area and the conditions that are suitable for a burn
- Fuel conditions, e.g. not burning green vegetation
- Time of year and day for your burn
- Light-up pattern
- Resources you will need for lighting up and fire suppression
- Personnel required for lighting up and patrolling the burn to ensure it does not escape
- Communications between all personnel
- Additional regulatory requirements, e.g. traffic management or smoke management plans

Contact Fire and Emergency for free planning advice. You may need to complete a burn plan, which will be reviewed and approved by Fire and Emergency before your permit is granted.

### 3. Prepare

Before you complete the burn, you need to prepare the following:

- **Fuel** – Prepare the fuel by cutting, crushing, desiccating or leave standing
- **Firebreaks** – Clear flammable material by creating firebreaks, safety zones and other exclusion zones
- **Personnel** – Organise the crews and provide personal protective clothing and communication devices
- **Resources** – Organise equipment, including light-up and fire suppression resources



## 4. Do

On the day of the burn, ensure you:

- Check the current fire season status to ensure that you are still allowed to light up
- Obtain the latest weather forecast, including current and long-range forecasts to ensure conditions align with the burn plan requirements, if applicable
- Notify the relevant people, including neighbours, and Fire and Emergency
- Confirm the safety zones and escape routes – establish **LACES**:
  - Lookouts
  - Awareness and Anchor points
  - Communications
  - Escape routes
  - Safety zones
- Perform a safety briefing. Ensure everyone is wearing the correct clothing – wool and cotton, not synthetic materials that can melt



## 4. Do, continued

- Light the fire by following the prescribed conditions signed off in the burn plan or permit
- Supervise the fire at all times that it is burning and be prepared to respond to changing weather conditions or fire behaviour
- Patrol and observe the adjoining land outside of the perimeter for spot fires
- Rapidly suppress any spot fires outside of the perimeter if it is safe to do so
- Continue to patrol the burn perimeter until all available fuel within the burn area is completely out

**Call 111 immediately if at any point you are concerned about a risk to people, property or the environment**



## 5. Post-burn

Check the burn in the days and weeks after burning is complete to ensure it's completely out and cannot escape.

Strong winds can fan a fire back into life and shift embers, creating unwanted fires. Piles of burnt material can hold heat for months after a burn. Turn the piles to ensure there are no hot spots.



## Further information

More detailed advice and information on how to safely use fire as a land management tool for specific burn types is available from the Fire and Emergency website.

If you have any comments or feedback on this guidance, please email  
[riskreduction.integration@fireandemergency.nz](mailto:riskreduction.integration@fireandemergency.nz)

The screenshot shows the Fire and Emergency New Zealand website. At the top, there is a header with the Fire and Emergency logo and a search bar. Below the header, the main content area is titled 'Fire as a land management tool'. On the left side, there is a navigation menu with links to 'Planning and prevention', 'Machinery and burn-offs', 'Using machinery and equipment', 'Forest management', 'Fire as a land management tool' (which is highlighted), 'Rural landowner fire safety checklist', and 'Rural farm & business fire safety checklist'. The main content area on the right contains text about the use of fire in New Zealand, the importance of safety, and the availability of guidance. It also lists key stages in safe use of fire as a management tool and identifies risks and considerations that need to be managed. The page is part of a larger document, as indicated by the '11' in the bottom left corner.

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