

FIRE AND OUR ENVIRONMENT

Different types of trees have a different relationship to fire

All of the vegetation in this region and throughout Queensland is broken down into separate categories called Regional Ecosystems (R.E). The type of R.E depends on which species are present, what type of soil it is on, etc. Based on each R.E, Reef Catchments has designed Guidelines about how often the vegetation in this region requires burning. These are called the Clark Connors Guidelines.

In addition to these guidelines, we have developed simple burn tolerance mapping, which is based off the Clarke Connors Guidelines.

It groups together all RE's with similar burn requirements and displays them in different colours.

As an example, from the Guidelines and the burn tolerance mapping, we can see that the vegetation on Mt Jukes (right) is a mix of rainforest and eucalyptus woodlands.

The recommended burn frequency for the woodlands is 3-5 years, but the mountain has not had a burn in at least 30 years.

Like to learn more about fire regimes?

If you would like more information, please contact Reef Catchments on info@reefcatchments.com or 07 4968 4200.

Bushfires are a natural part of the Australian landscape, and are important in maintaining diverse ecosystems. Many native Australia species require fire to survive. For example, some species of eucalypts require fire in order for their seeds to open.

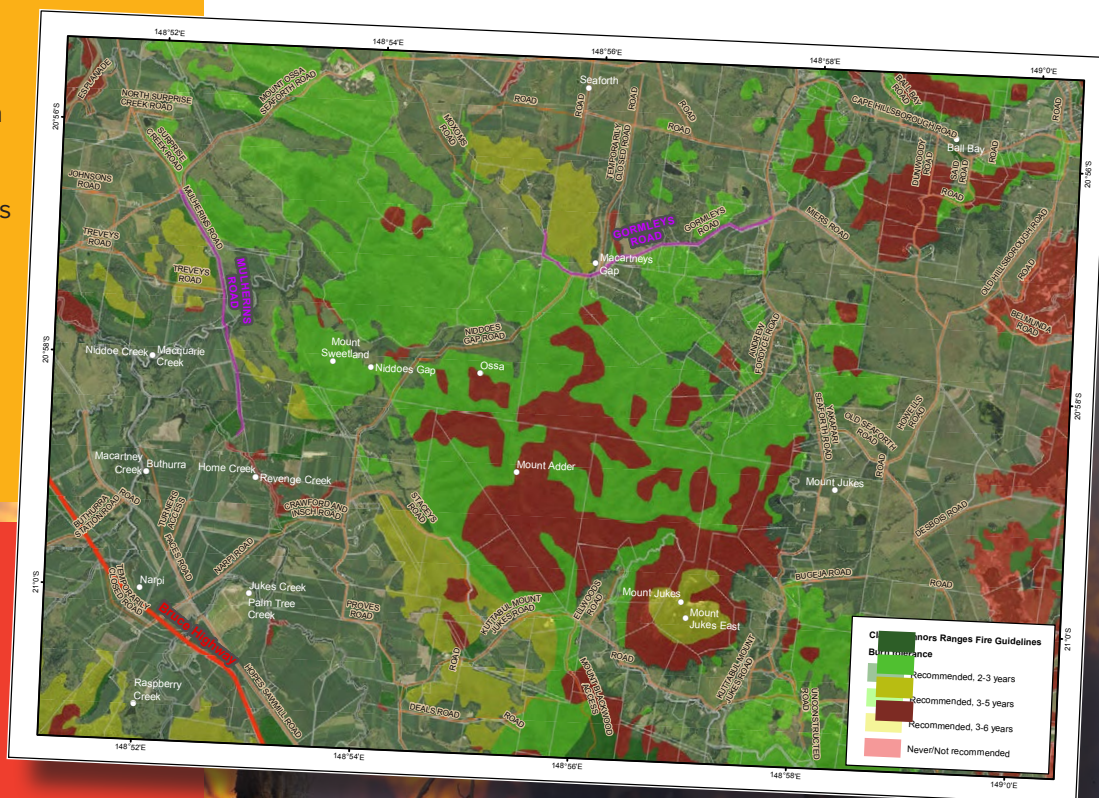
However, uncontrolled **wildfires** have the potential to cause serious damage to infrastructure, property, the environment and human life. Wildfires often occur when:

- The weather is hot and windy
- Fuel loads (such as branches, grasses and leaves) are high
- The vegetation is very dry

The intensity or 'hotness' of wildfires is damaging even for plants that need fire for their life cycles. 'Cooler' burns are a strategy that we can use to prevent these damaging wildfires.

By burning an area in ideal conditions (e.g. cool, little wind) and in a controlled setting, we can reduce the fuel load in a site safely, which in turn reduces the chance of harmful wildfires.

It is important that natural environments are management appropriately. It depends on the type of environment. Appropriate management can sometimes mean burning frequently (every few years) at a low intensity. In some cases, fire should be excluded completely. However, given that Australia is naturally hot and prone to fire, most vegetation types have adapted to benefit from bushfires.



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BALL BAY CASE STUDY

2008 WILDFIRE

In 2008 a wildfire swept through the remnant vegetation south of Haliday Bay. The fire occurred in hot, dry weather, with high fuel loads, and high wind speed. It was ignited by high winds causing power lines to arc together and spark. This wildfire caused extensive damage to the native environment and threatened local properties. The area had not previously burned for 15-20 years. To prevent a dangerous wildfire occurring again, a burn plan has been set up. The area has been split into five sections, with the aim that one section is burnt per year. This is known as a patchy, or mosaic, style burn. Each of the sections is being burned once every four years, as is consistent with the Clark Connors Guidelines. The recommendation for this vegetation is a burn frequency of 3-6 years.

The area is made up of habitat for the nationally listed wildlife such as the coastal sheath-tailed bat, the black-throated finch and the northern quoll. These species are either vulnerable or endangered and are protected under national legislation (Environmental Protection and Conservation Act 1999). Inappropriate fire regimes have been listed as a key threat to these species, so it is important to manage the area according to its recommended burn frequency.

